Clinical Lecture

ON A CASE OF

REMOVAL OF THE KIDNEY TOGETHER WITH BOTH OVARIES.

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GENTLEMEN,—I am drawing your attention to the case of a patient who is about to leave the hospital, not only on account of the clinical interest that surrounds the case, but also because it serves to illustrate certain points in the treatment of the subjects of abdominal operation.

The patient, a woman of twenty-six, was admitted in Jan. 1886, suffering from a tumour on the left side of the abdomen. She was thin and anæmic, and in bad health. She followed a somewhat laborious employment at a corset factory. She had been married for three years, but had never been pregnant. For six years she had suffered from profuse leucorrhœa. She was regular as regards menstruation, but at each period she experienced so much pain that she was compelled to rest for two or three days. She had been to more than one hospital about her pelvic troubles, but although she obtained some relief it was not long maintained. Two years ago she began to suffer from pain in the left side—a dull aching pain—that had persisted more or less ever since. A year ago she noticed a tumour in her left side. The swelling, she says, began "near the hip bone." It had grown slowly and steadily ever since.

This tumour, when it came to be examined, was evidently a tumour of the kidney. It was large; it reached from the ribs to the ilium; it extended to the right as far as the middle line; it was the seat of fluctuation. I should remind you that a renal tumour has the following characters:—1. It occupies the kidney region, filling up the loin between the last ribs and the iliac crest. (It should be noted that the hilus of the normal kidney lies about two inches from the middle line, and is opposite to the first lumbar spinous process.) 2. It is rounded everywhere; there is no sharp edge to be felt, and no notch, as in the spleen. 3. All is dull on percussion between the tumour and the spine, whereas in the case of a tumour of the spleen a resonant note can usually be brought out between the posterior margin of the mass and the spinous processes. 4. Unless the renal tumour is very large, it is possible to make clear its lower limits, and to demonstrate its freedom from connexion with the pelvic viscera. Its upper limits are not so readily made out. 5. The renal tumour, as a rule, does not descend on inspiration. 6. In front of it will be the colon. 7. If the tumour be innocent, it will not extend backwards, will not cause a protrusion of the loin. A cancer of the kidney may cause such a bulging in the lumbar region, and an abscess about the kidney will certainly have that character when it has attained to any dimensions.

In the case of this woman the tumour presented the general characters named. There were these special features, however: The lower extremity of the tumour could not be well defined. In the pelvis on the left side a rounded mass was to be felt on vaginal examination. It was soft and fixed, and it was not clear that it was quite separate from the abdominal tumour. This made one difficulty in the diagnosis. In the next place, the tumour was dull everywhere on percussion. There was no resonant bowel in front of it. The presence of the colon in front of a renal tumour is very usual, but it is not constant. When a certain disposition of the meso-colon exists, the bowel may lie entirely to the inner side of the mass. In the present patient I could feel crossing the front of the tumour from within outwards a movable cord, apparently about the width of the thumb. There was no difficulty in making it out. It felt solid, and was dull on percussion. It was the descending colon, empty and contracted. I have felt a precisely similar cord in another case of large renal tumour, and it proved on abdominal section to be the colon. I imagine that the nervous system of the intestime may have been disturbed by the tension of the bowel and mesentery, and so the tube retained in a contracted state. Neither in this case nor in the other named was the cord always to be felt, but there was never a tympanitic note in front of the tumour. In both patients the bowels acted very regularly.

No satisfactory diagnosis of the tumour was made before the operation. The fixed mass in the pelvis obscured the clinical picture. The abdominal tumour proved to be a very large hydronephrotic kidney, with scarcely any secreting tissue left; the pelvic growth was an adherent ovarian cyst. By hydronephrosis is meant a gross over-distension of the kidney by its own secretion. The trouble depends upon some mechanical obstruction to the escape of urine. The fault may be a congenital deformity of the renal hilus, the ureter, or the bladder. Most usually the obstruction is due to the pressure of a tumour on the ureter. Mr. Morris, in his most valuable work on the "Surgical Diseases of the Kidney," shows that by far the most common obstructing growth is a mass of pelvic cancer. In only four instances out of 142 examples of hydronephrosis collected by Mr. Morris was the obstructing cause an ovarian cyst. In the present case it is pretty clear that the ovarian tumour and the renal cyst stood in the relation of cause and effect.

There were two symptoms in the patient's case that pointed strongly to hydronephrosis. She stated that the tumour had at one time fluctuated in size, and that she occasionally passed large quantities of urine without apparent cause. These symptoms in hydronephrosis depend upon an occasional partial emptying of the distended cyst. During the time that the woman was under observation—about a month—the tumour never varied in size, nor did the amount of urine fluctuate beyond normal limits. Nothing abnormal was ever noticed in the urine. One other symptom, not uncommon in hydronephrosis, was absent—namely, frequent micturition. The tumour was irregularly rounded, was immovable, appeared to be of unequal density, gave a sense of fluctuation, and was not tender to the touch.

In the face of the doubts in the diagnosis, and the desirability that both the abdominal and pelvic tumours should be dealt with, I resolved to open the abdomen in the median line, in the region of the umbilicus. This I did on Feb. 2nd, 1886. I found the right kidney healthy and the peritoneum sound. The left renal region was occupied by a large hydronephrotic cyst. This was tapped, and then removed. The renal vessels and the ureter, having been clamped, were carefully and separately ligatured. The left ovary was the seat of a multilocular cyst the size of the fist. It was adherent to the left pelvic wall. The adhesions were readily divided, and the tumour was removed in the usual way. The right ovary was occupied by a similar multilocular cyst, the size of a hen's egg; it was free from adhesions, and was easily removed. The parietal wound was closed, and no drainage tube was employed. The patient has now recovered (after one vicissitude, to which I will allude), and is leaving the hospital, to all appearances, strong and well.

The operation in the present case must be regarded as quite exceptional so far as the kidney was concerned. The proper treatment of hydronephrosis is by lumbar nephrotomy. The cyst is exposed from the loin, is cut into and drained. If no kidney tissue is left, the resulting sinus may be induced to close, so far as my experience goes, by liberal injections of iodine. If any secreting tissue has survived, it may be removed by a subsequent operation at little risk, and the urinary fistula may thus be healed. The condition must be very rare in which abdominal incision would be required in hydronephrosis.

I might now mention a few of the circumstances that attend the opening of the abdomen. There is nothing special in the preparation of the patient, and there is no precaution required in ovariotomy that ought not to be taken in any other operation of any magnitude. The patient lies with his arms folded behind his back, and needs to be held by no kind of apparatus. All parts of the body are warmly covered; the lower limbs are enveloped with a small blanket, and are then packed, as it were, in a mackintosh. The ordinary mackintosh, with a hole, is used for the abdomen. Every trace of blanket or flannel should be covered up. In the gap between the thighs and the buttocks several sponges are packed, so that if any fluid runs down over the pubes it is at once absorbed. All the water used in the operation is carbolised; all the sponges are kept at a temperature of about 100° by the "sponge warmer." While the abdomen is actually open I use a carbolic spray. It is used partly at the dictate of a kind of surgical superstition and partly for this reason: the abdo-

minal walls are flaccid, and after the removal of a tumour, and during the introduction or withdrawal of the hand or sponge, considerable volumes of air must enter the abdomen, and it is well that the air should be as pure as possible.

With regard to the actual incision, it must be remembered that there is no linea alba below the umbilicus. Unless the muscles are separated by distension the knife will open one or other rectus sheath. The abdomen should be opened by precise, clean cuts; a director is an abomination, and the practice of deepening the wound with the fingers belongs to the surgery of past ages. Before the intra-abdominal operation is commenced a large sponge is placed in Douglas' pouch, and left there until the abdomen is ready to be closed. In removing the kidney the inner layer of the mesocolon will have to be divided. In that layer the vessels to the bowel run, and are very easily wounded. This especially applies to the inferior mesenteric vessels on the left side. In this and like operations a Trouvé's electric lamp is very useful, and saves much vague groping about within the peritoneum. In the process of removal it is scarcely possible to avoid actually tearing the serous membrane that covers the kidney. The rent made need not be closed, and the peritoneum appears to fall easily together. When much blood or fluid has escaped into the peritoneal cavity during the operation, it is much more readily got rid of by really washing out the abdomen than by the laborious and possibly damaging process of sponging. The assistant holds up the flaccid parietes by means of the wound edges, and the surgeon then pours in many pints of slightly carbolised water at a temperature of 100°. In this water the intestines can be rinsed. The water is allowed to flow off until it runs clear. A simple arrangement of the mackintosh allows it to drain away. The pelvis is then sponged out. Finally, the patient is slowly and carefully raised almost into a sitting posture, and the fluid that has collected among the intestines and in the pockets about the loins can gravitate into the pelvis, from which it is removed by sponging. The last sponge introduced should come out dry and clean.

In adjusting the incision the edges should be kept tight and parallel with one another by means of large blunt hooks inserted at either extremity of the wound, and held tightly by an assistant. The incision is then made, an even cut, and parts that were in contact before the operation come in contact again after the sutures have been completed. By means of the hooks, also, the parietes are drawn away from the viscera during the process of suturing. Upon the intestines lies a very thin flat sponge. It absorbs the last drops of blood that may come from the wound during the application of the sutures. It is drawn out just before the last two sutures are tied, and is thus made to wipe the peritoneal aspect of the wound. The only dressing I ever employ is a single large sponge well dusted with iodoform and secured over the wound by a gauze bandage. Before the bandage is applied, an extensive packing of loose soft gauze is made around the sponge, which is thus retained in position. The sponge exercises pressure upon the part, absorbs any discharge, and soon becomes dry. The gauze fills up the abdominal hollow and the depressions about the groins. Over all is a flannel binder that is accurately shaped to the body and is held firmly down by two pieces of flannel that pass along the perineum and around the thighs, and have either of their ends secured to the binder. If these thigh pieces are properly applied, it is hardly possible to work the finger beneath the binder in the region of the pubes. The wound is thus well protected in the most dangerous quarter. The sponge is easily cleaned after use, and may be employed over and over again. The dressing therefore is not expensive. This dressing is not disturbed until the sixth day, when it is removed and all the sutures are taken out. The wound is then supported by harelip strapping. This strapping is especially prepared, is fenestrated, and cut into strips that interdigitate. It keeps the wound together, but at the same time does not prevent any discharge from escaping, and any portion of the strapping can be readjusted without disturbing the rest. The sponge is replaced by iodoform gauze.

The general after treatment requires no comment, and is founded upon the simplest principles of therapeutics. On the second day warm fluids appear more acceptable than ice. After the removal of the kidney the patient sometimes remains low and dull, and is troubled with a somewhat persistent vomiting. The urine will generally be found in such a case to be of high specific gravity—1025 to 1040; and the symptoms probably are of renal origin. Under the circumstances, the greatest relief is afforded by a hot-air bath. This can be administered as the patient lies in bed without disturbing her in the least. It promotes profuse perspiration, and its use has been attended—in the few cases in which I have employed it—with most satisfactory results.

In the present instance another complication occurred on the fifth day: the patient developed symptoms of peritonitis. She had been very restless after the operation, and very sick. During the removal of the cyst some of its contents escaped into the peritoneal cavity, and may have caused the trouble. The abdomen, however, had been well flushed out. There had been no carboluria. The abdomen became distended; there was much vomiting, and a considerable amount of pain. The peritonitis was evidently attended by effusion. I imagine that peritonitis with effusion and pleurisy with effusion are pathologically the same thing, and are likely to be met by the same plan of treatment. Had the patient had a pleuritic effusion the fluid would have been withdrawn, and there appeared to be no reason why the peritoneal fluid should not be dealt with in like manner. The wound was therefore allowed to open at the lower part, and a very considerable quantity of clear serous fluid escaped. The upper part of the incision was most carefully supported by strapping. The wound was very frequently dressed with iodoform gauze. The fluid continued to ooze out in diminishing quantity for three days; it then ceased. By this time the patient, who had been fed by the rectum and had taken large quantities of brandy and opium, was free from urgent symptoms. The bowels were opened by enema on the ninth day. The wound was healed entirely by the twenty-first day. Six months have now elapsed since the operation, and the patient is up and walking about.

One small point remains. There is a risk after abdominal operations of a ventral hernia forming at the seat of the wound. To prevent this a strong abdominal belt is sometimes ordered. Such a belt I have never allowed a patient to wear. The ventral hernia is due to a weakening of the abdominal parietes. That wall is composed of muscular and aponeurotic tissues, and its strength will depend upon the state of development of the muscles. Muscle can only be made strong by use. If a belt be worn, the responsibility of supporting the viscera is thrown, not upon the abdominal muscles, but upon the instrument. The muscles are not encouraged to act. They are in the same position as the biceps when the arm is carried in a sling—wasting from disuse. To prevent a ventral hernia the patient should not be allowed to get up too soon. A month in bed is not an unreasonable time. She should not get up until the wound is sound. She may wear a light flannel binder for a few weeks after she is about again, but at the end of that time she should discard supports of all kinds. I am speaking, of course, of an ordinary case. With an abdominal wall already much weakened, loaded with fat, and pendulous, a substantial support may be needed.

The patient has reported herself a year after the operation. She is in good health and in actual work. The scar is sound, and shows no symptom of yielding.

THERAPEUTICAL VALUE OF THE MORE RECENT ADDITIONS TO THE GENITO-URINARY PHARMACOPŒIA.[1]

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THREE years ago the Drug Committee of St. Peter's Hospital recast the Hospital Pharmacopœia. It would have been obviously unwise to have included any of the newer remedies without good evidence as to their real value. It would have been still more unwise to have rejected them altogether. I undertook, therefore, to investigate these "new drugs" systematically in the out-patient department, and to report subsequently upon them.[2] To make the inquiry thorough a large outlay of money would have been needed. This initial difficulty was overcome by the prompt generosity of Thos. Christy and Co., Lime-street, City. Those

[1] Abstract of two lectures delivered at St. Peter's Hospital.

[2] The histories of, and physiological experiments with, these drug have been necessarily omitted.

well-known drug importers placed at my command for three years an unlimited supply of the new remedies which have been advocated for the treatment of genito-urinary disease. The following few grains of wheat remain after much winnowing.

Kola (Sterculia acuminata). — A powerful stimulant; contains 2·3 per cent. of caffeine, also theobromine. In the form of chocolate I found this drug to be of great value in tertiary syphilis, where large doses of potassium iodide have to be administered. The cases of syphilis in which the chocolate was first tried were often of the worst and most neglected type, being drawn from the neighbourhood of the London Docks. Later work has proved its value in the well-fed. Patients were able to take doses of 30 gr. to 60 gr. of the iodide without inconvenience as long as the kola was administered with it. It is now prepared in the form of a paste—"kolatina"—like cocoa paste, as it is found more effective in the liquid form. From 1 dr. to 2 dr. makes a breakfastcupful; where this is inconvenient, the stick kola-chocolate is eaten. Dose, 1 dr. to 2 dr.

Salix Niger (Black Willow).—A sexual sedative of decided value; useful in ovarian hyperæsthesia, also in prostatorrhœa, spermatorrhœa, excessive seminal emissions, and enforced continence. In the latter disorders its action is good, but inferior to potassium bromide. This is, however, somewhat counterbalanced by its non-depressant qualities. Dose, ½ dr. to 1 dr. Finding it of value in those wearisome cases of urethral neuralgias following gonorrhœa, I began to substitute soda salicylate for it. I was impressed by the relief this latter afforded. In cases of urethral pain in the adult, I first eliminate stone, stricture, urethral granulations, and over-acid urine, and then prescribe soda salicylate (5 gr. to 8 gr.), with a gratifying result.

Lycopodium clavatum.—The tincture is of real value in frequent micturition, irritable bladder, and cystospasmus, where such is not dependent upon actual disease or foreign body. It has been found useful in spasmodic retention of children. Dose, 15 m. to 1 dr. Note: White lycopodium is an inferior substitute, but still of some value. Dose, ½ dr. to 1 dr., between bread-and-butter. Yellow lycopodium is useless.

Kava Kava (Piper methysticum).—This drug is of benefit in pyelitis, cystitis (acute or chronic), and urethritis. It is inferior to copaiba, and sandal oil, but much more pleasant to take. It is of value when the oils are not tolerated. The inflammation seems to be increased at first. Fluid extract, ½ dr. to 1 dr. on a full stomach.

Stigmata maidis (Corn Silk). — Difficult to obtain at certain seasons, but of great value in pyelitis and renal colic. One case is especially worthy of notice. A patient who had suffered from renal colic and pyelitis for seventeen years was admitted into the hospital for exploration of the kidney. The patient was so relieved with corn silk that he refused operative interference. It is also of value in chronic or subacute cystitis, but in my hands it has failed in acute cystitis. Note: The fresh infusion is the best; dose, a wineglassful. Failing this, use the extract; dose, ½ dr. to 1 dr.

Papaw, Papyotin, Papaine (Carica papaya).—Of marked benefit in syphilitic ulcers of the tongue and throat, especially when mixed with cocaine. The surface of the ulcers and the white patches (secondary syphilis) rapidly clean and begin to skin over. Lozenges have been made by Messrs. Christy, which are most useful (papaine, ½ gr.; cocaine, ¼ gr.; potass. bicarb., ¼ gr.). In a girl of seven with severe syphilis of the mouth (after direct inoculation) the ulceration had resisted all applications for eight or nine months, and the child had wasted considerably. A few of these lozenges produced a marked effect, the ulcers healed, and the child rapidly fattened. Mix papaine with a small quantity of glycerine and water, so as to form a thin paste, add a little bicarbonate of potash, and brush ulcers with the same thrice daily. Whatever its position may be, as a digestive ferment papaine is worthy of trial as a preventive and reducer (?) of renal calculi. Dose for renal stone, 1 gr. to 3 gr., or more, in pill or powder; to be taken with meals.

Piché (Fabiana imbricata). — Of undoubted value in lithiasis and renal stone. One patient obtained so much relief from the hæmaturia and pain that he obtained the plant direct from Peru every mail, and made the infusion himself. In my hands it has failed in chronic cystitis. Dose, fluid extract, ½ dr. to 1 dr; infusion, a wineglassful.

Cocaine.—The fresh work with this drug is to be brought before the Medical Society. Routine work: Lithotrity in the feeble was performed with a 4 per cent. solution; small stones in the adult with a 20 per cent. solution. Internal urethrotomy needs a solution of 20 per cent., and any vesico-urethral instrumentation one of from 4 to 20 per cent.

Naphthaline ($C_{10}H_8$).—A derivative of benzol and allied to phenol. Given with benefit in fetid urine. The micrococci speedily disappear, and the urine becomes sweet. The large doses recommended (15 gr.) are unnecessary, and produce vomiting and abdominal pain. Dose 3 gr., cautiously increased. Note: Urine of patients taking naphthaline smells of phenol, and may remain exposed for some days without change.

Pine or Spruce Extract (Abies excelsa).—Has a slight diuretic action, and relieves renal pain unconnected with calculus. It is of use also in a bath, and as a liniment in gonorrhœal rheumatism. It is a pleasant vehicle for drugs in pyelitis and cystitis. Has proved of benefit in gleet. Dose, 1 dr. in water.

Ulexine (Ulex Europæus).—"A more powerful diuretic than sparteine or preparations of sarothamnus scoparius" (Gerrard). This is to be employed with caution in stricture. One patient with stricture of old standing, after taking a pill containing $\frac{1}{15}$ gr., had temporary suppression of urine, vomiting, and fever.

Strophanthus (Kombè). — I believe there is a distinct future before caffeine, digitaline, and strophanthus as adjuvants to operations upon the vesico-urethral tract. We have sometimes to deal with partial or complete temporary suppression, and sometimes with rigors after operative interference or even instrumentation. Caffeine seems indicated to avert the former; strophanthus the latter. Again, if we have reason to anticipate sudden flooding of the renal vessels and consequent urinary fever as the result of an operation, then digitaline, from its power of controlling the renal circulation, is indicated. Our treatment, however, on these lines must go *pari passu* with our oncometric knowledge of drugs which affect the kidney circulation or the abdominal blood pressure. I believe strophanthus has power, worthy of further investigation, in controlling rigors. I employed it on the theoretical grounds that it increases cardiac power and general blood pressure. Five in-patients suffering from violent rigors after instrumentation, were treated with the tincture in doses of 5 m. after catheterisation. In no instance were rigors induced.

Chaulmügra Oil (Oleum gynocardiæ). — Of value as a liniment in gonorrhœal rheumatism, osteocopic pain of syphilis. Its power is increased if it is mixed with lanoline. It has great influence upon some forms of adenitis, also in secondary syphilis. Dose 5 m. to 10 m. on a full stomach.

Hydrastis Canadensis (Golden Seal).—Of some use as an astringent vesico-urethral injection, checking mucous discharge; worthy of trial in some forms of prostatic engorgement and enlargement. Dose, 10 m.

Damiana (Turnera aphrodisiaca).—Good in some cases of diminished sexual power, where such does not depend upon organic disease. Often of use in melancholia and depression, if of genito-urinary origin.

Caroba (Jacaranda tomentosa). — Of some value in secondary and tertiary stages of syphilis. Dose, 1 dr.

THE

BERGEON TREATMENT OF CONSUMPTION.

BY OWEN PRITCHARD, M.D.

I ENCLOSE notes of two cases of phthisis treated in private practice by gaseous injections into the rectum, after the plan advocated by Dr. Bergeon. All the details of this treatment being so lucidly and minutely described by Dr. Burney Yeo in his lecture published in THE LANCET of April 16th, it would be an entire waste of time to enter into the particulars of it. I would only say that, having obtained the necessary apparatus, I endeavoured as nearly as possible to follow the directions so explicitly given by Dr. Yeo.

CASE 1.—Mrs. E——, aged sixty (her usual weight 10 st. 5 lb.), says that in July last year she began to lose strength, had a slight cough, her appetite became indifferent, and she noticed that she was losing flesh. After a fortnight at Hastings she was much improved, but on her return

to London about the end of August she soon began to lose flesh again, and her cough became very troublesome, with a persistent sore throat. She attended the Throat Hospital until the end of December, gradually getting weaker. Becoming very uneasy, she tried one or two other institutions; but during January, February, March, and April she was still rapidly losing flesh, the cough was much more troublesome, the expectoration thicker and more profuse, and the night sweats exceedingly severe. In the beginning of June, when I first saw her, she weighed 8 st. 5 lb., having lost 2 st. from her usual weight in eight or nine months. She complained so much of the cough and night sweats that she declared she never could sleep more than half an hour at a time, and even this amount of sleep was much disturbed by frightful dreams, such as tumbling over cliffs, fancying herself fighting bulls or tigers, or assisting to put out fires, &c. On examination, her left lung was, as far as I was able to judge, normal, but the right was quite solid from apex to base, and a portion about midway between the nipple and axilla had actually broken down into a cavity. Her temperature varied from 101° to 103°. The expectoration was purulent, very copious, and full of bacilli. The first operation was performed on June 9th, and repeated each day from then until now. For the production of the sulphuretted hydrogen a solution of sodium sulphide and caustic soda similar to that advised by Dr. Yeo was used, and the sulphuretted hydrogen liberated by throwing in a small quantity of tartaric acid. Now, as is the case with nearly all the victims of consumption, one was not at all surprised to find this patient declaring herself much better at the end of the first week of a new treatment. She, however, knew exactly in what way she was better. Her cough, she said, was easier, and the expectoration somewhat diminished; the night sweats had almost ceased to trouble her; but, above all, her sleep had returned and the frightful dreams had gone, and she could now, she said, sleep for four hours right off, and then only wake up to cough and bring away the accumulated phlegm, and turn over and go to sleep again. Several weeks thus went on, the patient assuring herself and everybody around her that she was daily improving. She got up, she said, every morning refreshed after her beautiful night's sleep. Her temperature, however, still kept up, and the tubercle bacilli remained in the expectoration as numerous and robust as ever, but the amount of expectoration diminished, and for many weeks she continued to lose weight rapidly. Her temperature for some weeks past has been considerably lower, seldom over 100°, and she has in the last week or two actually gained a little in weight. A table of her weight with dates as taken is as follows:—June 9th, 8 st. 5 lb. 14 oz.; June 24th, 8 st. 3 lb. 8 oz.; July 12th, 8 st. 1 lb.; July 22nd, 8 st. 10 oz.; Aug. 4th, 7 st. 13 lb. 14 oz.; Aug. 15th, 8 st.; Aug. 22nd, 8 st. 1 lb. 8 oz.; Aug. 29th, 8 st. 3 lb. From the foregoing it will be seen that she was losing very rapidly at the beginning of her treatment, but her loss gradually became less marked, and for the last three weeks she has actually gained some pounds in weight.

CASE 2.—Mrs. T——, aged thirty-four. Last October she had a sharp attack of bronchitis, from which she has never quite recovered, a troublesome cough remaining through the winter. During the first four or five months of this year she had been getting thinner, her appetite being very bad and her night's rest greatly disturbed by the cough and the severe night sweats. When I saw her in the beginning of May she was considerably emaciated; temperature 99° to 100°; moist râles over both apices; right apex slightly dull on percussion; expectoration was abundant; breathing short and asthmatic; her face livid. On May 28th her weight was 8 st. 10 lb., when the first operation was performed, and continued daily until July 30th. After the first week her cough was much improved, and, the night sweats having disappeared entirely, she slept well, her breathing was quite free, and consequently the colour of her face was much healthier. But, like Mrs. E——, her great pride was that she slept so much better, being undisturbed by cough and night sweats. During the first four weeks of treatment she lost 3 lb. in weight, but during the last five weeks she gained 6 lb., and left town for Devonshire in the beginning of August, and I have just received information from her that from August 3rd to 19th she had gained another 3 lb.

These cases are, of course, at present incomplete, but they seem to me as far as they go to prove very distinctly that this treatment, even if it does not positively cure, very greatly retards the progress of the disease, and almost entirely removes its most trying symptoms.

Southwick-street, W.

CASE OF SUPPURATIVE PYLEPHLEBITIS AND ULCER OF THE VERMIFORM APPENDIX.

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JAS. D——, aged forty-eight years, was seen by me first on Dec. 22nd, 1886, in consultation with Dr. A. J. Fergusson. He had then been ill for about seven days. He was a man of exceptionally good physique, had never had any serious illness, had suffered twice from attacks of ague in Canada twenty years before, but, except that he had a somewhat irritable digestive system, his health had always been very good. His habits were temperate and regular. On Dec. 11th he had dined more freely than usual, and had been exposed a good deal on a cold and wet day. On the 14th he felt a good deal of pain in the abdomen, and was slightly sick. The weather at this time was unusually cold, and he believed he had taken a chill. On the 17th he began to have a series of shivering fits, "exactly like his ague attacks twenty years before," and recurring at regular intervals of about eleven hours. In about twenty-four or thirty-six hours jaundice set in. The bowels were freely opened, and the motions appeared at first normal in character.

When I saw the man on Dec. 22nd the jaundice was very deep. He was in a state of great mental and physical depression. Temperature 101·4°; pulse 96, fairly regular. He had had one attack of epistaxis, and there was a slight expectoration of mucus tinged with blood, not unlike the rusty sputum of pneumonia. The heart sounds were normal, and the lungs seemed to be quite healthy. The abdomen was distended with flatulence; there was no pain complained of in any region, but deep pressure over the region of the gall-bladder seemed to give rise to some discomfort. Owing to the flatulent distension the liver dulness was less than normal. The bowels were rather constipated, and the stools seen at this date were apparently quite devoid of bile. The urine was deeply tinged with bile pigment. On the 24th he was much weaker; the temperature in the evening reached 104° and he had had several attacks of extreme prostration, especially occurring in the early morning. During these attacks the pulse became intermittent and feeble. On the 25th he was distinctly delirious. The weakness was increasing, but the pulse remained regular—96 to 100. The stools contained no bile, and the urine was very deeply coloured with bile. On the 26th there was a very slight trace of bile in one stool. Jaundice continued intense. He was pretty constantly in a state of low muttering delirium, or sleeping uneasily by fits and starts. There was no vomiting. At 1.10 P.M. the pulse was 96; temperature 98·4°; respiration 36. The meteorism was more marked than before. On the 27th there was some vomiting after taking extra nourishment which had not been ordered, but otherwise his condition was unaltered. The feebleness and delirium became more marked, and on the 28th he passed into a state of coma and died in the evening.

A post-mortem examination was made two days later. The body was well nourished. The abdomen was distended by gas in the intestines. The liver was normal as to size, but, on cutting into it, was found to be studded with small points of purulent deposit. The portal vein and its radicles were filled with greyish pus, the points above noted being the vessels seen in transverse sections. The gall-bladder was nearly empty, and it and the gall-duct seemed normal. The intestines were congested in parts. In the stomach were a few small inflamed patches near the pyloric orifice, but, on tracing the intestine down to the cæcum, no ulceration could be found to account for the suppuration in the portal vein. Round the vermiform appendix, however, a wormy mass could be felt, and on removing this with the cæcum and vermiform appendix, it was found to consist of apparently a mass of congested or strangulated tissue. On opening the cæcum, no ulcer could be seen there; but on

laying open the vermiform appendix, it was found to be ulcerated for about an inch from the entrance to the cæcum; the ulcer became continuous with the outside congested mass, which was composed mainly of inflamed veins. The mesenteric veins were not noticeably enlarged. Only these parts of the body were examined.

Remarks.—The post-mortem examination cleared up what had been a very doubtful case during life. The sequence of events seemed then plain enough. Some foreign matter—not detected post mortem—gave rise to an ulcer of the vermiform appendix; this was followed by a local phlebitis, and that again by phlebitis of the portal vein by embolism. All the radicles of the portal vein were more or less involved, but circulation through it was free enough, as there was no ascites or other sign of impeded portal circulation. The jaundice may have arisen from retention of bile elements in the blood, or bile may have been secreted as usual by the liver cells and immediately reabsorbed. The gall-bladder was empty, and little or no bile had found its way for some time into the intestine. Very little notice seems to have been taken of this condition by British writers. It is not mentioned at all in most of the various English works on medicine. In Quain's Dictionary there is a brief notice of the disease, and a passing reference to it in the article on Jaundice. I have not been able to find any cases reported in THE LANCET or the *British Medical Journal* of the last eight or nine years; and yet the condition cannot be very uncommon. There is an account of it in Frerichs' "Diseases of the Liver," derived from twenty-five reported cases. In Ziemssen there is a very large number of references given to cases of suppurative pylephlebitis, mostly from German sources, but partly also from English and French; and in Pepper's "Practical Medicine" the disease is spoken of as a common one. Concerning the diagnosis of the disease there seems to be a good deal of difference of opinion. Von Schueppel, writing in Ziemssen's Encyclopædia, says: "Some consider it a rare stroke of good fortune to recognise the disease; others maintain that nothing is simpler and easier than the diagnosis of suppurative pylephlebitis." Frerichs says that jaundice occurs in three-fourths of the cases of pylephlebitis. Dr. Bartholow, writing in Pepper's work, says that three-fourths of the cases are free from jaundice. The most important factors upon which the diagnosis should be based are stated by von Schueppel to be the following, or some of them. 1. The presence of an affection which we know may act as a starting point of pylephlebitis. 2. Pain at the epigastrium or any situation in which the pylephlebitis may start. 3. Rigors at irregular intervals, with high temperature, and *during the intermissions* abnormally high temperature. 4. Recent painful enlargement of the liver. 5. Considerable enlargement of the spleen. 6. Jaundice, with biliary diarrhœa. 7. Rapid emaciation and loss of power. 8. The occasional development of diffuse peritonitis and typhoid symptoms in the later stages of the disease. Comparing these diagnostic factors with the history of the case reported above, hardly any of them could be said to be present. There were no antecedent or existing symptoms pointing to the presence of any exciting cause of pylephlebitis. There was some diffuse pain all over the abdomen early in the disease, and tenderness on pressure about the portal fissure, but no local pain was complained of. The rigors occurred pretty regularly at first, then were replaced apparently by attacks of collapse, and the temperature was not abnormal in the interval. The liver was neither enlarged nor painful, nor could the spleen be traced owing to the flatulent distension of the intestines. The jaundice was not accompanied with biliary diarrhœa, there was little or no emaciation, and there was no peritonitis. In this case the symptoms which seemed most characteristic were the quick interference with the functions of the liver, the jaundice, the biliary toxæmia, and the ague-like rigors, occurring in a previously strong and healthy man, not exposed to any malarious or other poisonous agencies.

AT the recent examination at Aldershot, at the end of the summer course, for medical officers of the army, on the subjects of Military Law, Bearer Column Organisation and Drill, the first, second, fourth, and sixth places in order of merit were assigned to Volunteer medical officers. The first place was taken by Surgeon W. Collingridge, M.D., 3rd (Woolwich) Division, Volunteer Medical Staff Corps; Surgeon J. Reece, of the London Division, being second.

REMARKS ON ALGIERS AND ITS CLIMATE.

BY T. D. SAVILL, M.D. LOND., M.R.C.P.

AT a time of year when so many people are planning or taking their annual holiday, in pursuit of either health or pleasure, it occurred to the writer that a few remarks on Algiers and its climate would be appropriate to the season, and acceptable to the readers of THE LANCET. The facts to be mentionbd are based chiefly on information gained during the greater part of three winters which were spent in or near the town. But there are, perhaps, few things more difficult than to give a strictly true and impartial account of a health resort. The impressions of a place which each one forms so much depend on the kind of the season he encounters there, his comforts and immediate surroundings, and on his very mood of mind, that it is not surprising if two descriptions of the same place differ as widely as sunshine and shade. The only way to get at the approximate truth about a climate is by the examination of a series of accurate and carefully recorded meteorological observations extending over many years, combined with a careful study of the vegetation and physical aspects. There are some of the first-named records scattered through the numbers of the *Journal de Médecine et de Pharmacie d'Alger*, made by M. MacCarthy, the librarian of the Musée Bibliothèque, through whose kindness I have been able to procure them.

The town of Algiers is situated on the western side of a wide, shallow bay, and its general aspect is east-south-east. It is flanked on the west and north-west by hills of the Sahel range, which reach an elevation of 1000 to 1500 feet, and it is well protected on all sides except east and south-east. It may be mentioned, in passing, that the winds coming from these directions are generally mild. The north-west wind is the one to be dreaded, for it is fierce, cold, and wet. The town itself is built up the eastern side of one of the Sahel hills. The more modern part is situated along the sea coast; and the old town, with its narrow streets and white windowless houses, just as it was in the days when it was the home of the Barbary pirates, stretches tier above tier to the top of the hill, at the summit of which is the Kasbah or citadel. The beautiful suburb of Mustapha Supérieur, consisting of villas scattered along the wooded sides of little hills, and almost entirely appropriated by English visitors, lies to the south. The old part of the town retains its Oriental characters in a marked degree. The houses, which are always built round a central court, with no windows outside, and a flat roof, are packed close together, and the streets are so narrow as only to allow sufficient space for two pedestrians to pass.

The natives of both sexes also preserve their Arab garb, and until lately did not mix very freely with their conquerors, the French. The dress of the women out of doors consists of a long white shawl of delicate texture, covering the head and shoulders, gipsy fashion; a *yashmâk*, concealing the lower half of the face; and loose white pantaloons, which cover their nether extremities to the ankle. The Arab is characterised by his olive-brown skin, black hair and eyes, fine physique (generally speaking), and a remarkably grave and dignified bearing. His dress is all white, and those who live in towns wear a turban of white linen, loose hooded cloak or *bournous*, beneath which their bare or white-stockinged legs appear, terminating in shoes of ordinary pattern. They are an interesting race, and it is difficult to account for the gradual dying out of a people that still present so fine a physique. In addition to natives, Maltese, and French, there is a large Jewish population, who still wear the ancient Jewish garb. Mixed altogether, these different costumes have a picturesque appearance, which is very striking to the eye of a stranger. And thus it happens that there are three distinct Sabbaths observed in the town: the Mohammedan on Friday, when the women repair to the cemeteries; the Jewish on Saturday, when quite half the shops in the town are shut; and the Christian Sunday. An interesting ceremony is conducted every Sunday at Nôtre Dame d'Afrique, situated on the highest hill near the town, where the burial service is read over the sea for all mariners who may have been drowned during the preceding week.

There are several hotels in the town, but no one in pursuit of health or pleasure should stay there, for it is neither sanitary nor agreeable.

The vegetation around Algiers is very luxuriant, and leads one to expect a heavy annual rainfall. The hedgerows are formed of cactus or prickly pear, interspersed with the thick-leaved aloe, whose tall flower-stems stand up like sentinels. Palms of many varieties, and the broad-leaved banana tree, with its huge spiral bunches, flourish in the very precincts of the town. Roses bloom in January, and green peas are then in season. In the shaded nooks of Mustapha the maidenhair fern grows wild, and the mountains on the opposite side of the plane are covered with hardy lentiscus and olive trees. Between the hills along the shore, the plane of the Metidja extends for sixty miles from east to west. Here grapes, oranges, and lemons are cultivated with success. The latter are of much value as climatic indicators, for the blossom does not survive a single degree of frost. The eucalyptus tree does exceedingly well under the combined influences of high temperature and heavy rainfall. In the exhibition of native industries there is the trunk of a tree thirty feet long, which took, so it is stated, only three years to grow.

The soil on which Algiers is built is mainly gravel and chalk. In the Metidja and the planes generally of Algeria it is clay, and on the high table land it consists of loam. I have often heard it said by those who have been there, that the appearance and arrangement of this latter is very like the gold fields of Australia, and is very suggestive of gold. Earthquakes occur from time to time in the interior, but are never of great severity.

The climate of Algiers is essentially one for the winter months. From the middle of October to the middle or end of April is the most agreeable time to stay. The mosquitoes are troublesome until the former date, but for those who like moderately warm weather May is an exceedingly agreeable month. I have heard of consumptive invalids deriving great benefit by staying for two winter seasons and through the intervening summer, but the heat of July and August must be very trying. The following are the mean temperatures (reduced to the Fahrenheit scale) of the months throughout the year 1884, which, after an examination of the records, I selected as a sample:[1] January, 53·2°; February, 58·1°; March, 58·1°; April, 60·1°; May, 65·8°; June, 67·5°; July, 75·2°; August, 77·7°; September, 76·8°; October, 66·9°; November, 59·7°; December, 56·4°. The mean temperature of the six winter months of this year was 58·7°, that of the summer 70·5°. The average winter temperature (October to March), reckoned from the Government observations in the thirteen years 1865 to 1877, was 58·4° F. This is a temperature which will compare very favourably with most of the winter health resorts on the other side of the Mediterranean.

In all countries where clear atmospheres and cloudless skies prevail, the rapid radiation of heat from the earth immediately after the sun goes down gives rise to a sudden chilling of the air and to heavy dews; and since Algiers is no exception to this rule, invalids should avoid being out at this time, although I believe, from the observations which I made, that the fall of the mercury rarely exceeds 8° or 10° F.

There are no records of the number of hours of bright sunshine, but the amount of this is one of the most noticeable features of the climate. In the months of November and December, 1880, I counted forty-seven consecutive fine days. Rain fell during this time, but it came at night, and therefore did not hinder invalids from going out. In 1884 the number of days on which no rain at all fell was as follows—January, 20; February, 20; March, 14; April, 14; May, 26; June, 24; July, 28; August, 28; September, 20; October, 18; November, 9; December, 14. Total of six winter months, 95; total of six summer months, 140. Besides the days on which no rain fell, there were others when it fell at night, or for such a short time as not to prevent invalids from being out of doors. The rainfall of that year was 22·9 inches in winter and 7·4 inches in summer.[2] No doubt this is large as compared with some places. It is only what is to be expected from an examination of the vegetation. Two facts, however, should be remembered in relation to this—firstly, that it frequently rains in the night; and secondly, that the showers are mostly very heavy while they last. The percentage humidity during the year 1884 was as follows—January 73, February 66, March 72, April 65, May 69, June 70, July 71, August 71, September 71, October 70, November 76, December 75, saturation being represented by 100. The mean of the winter months was 72 per cent., and of the summer 69 per cent. For the sake of comparison it may be mentioned that the mean annual humidity recorded at the Greenwich Observatory is 87 per cent.

One may say, then, of the winter climate of Algiers that it is mild, equable, and of medium dryness; that there are usually a large number of fine days, and days on which the invalid can be out of doors; and that the proximity of the sea on the north imparts to it a bracing character, which is hardly to be expected after an examination of the rainfall and percentage humidity.

The class of disease for which Algiers is most suited is undoubtedly lung affections, and especially phthisis. It is not within the scope of this brief note to discuss the relative advantages of high, dry, mountain air, and such climates as the one now under consideration, in the treatment of pulmonary tuberculosis.[3] That this disease, when not too advanced, is capable of being arrested and ameliorated by residence under favourable conditions at Algiers there is ample testimony to show. Dr. Feuillet was deputed some years ago to make an official inquiry into the relative frequency of phthisis in Algeria compared with that in Europe, and in 1874 he published the results of his observations at considerable length.[4] The conclusion arrived at was that "deaths from phthisis in Algeria are but a fifth part as common in Algeria as in Europe." This was derived from figures which included cases occurring both amongst Europeans (many of which were imported) and amongst natives. His observations also revealed three facts, which he offers (p. 140) in explanation of the above statement: "1. That phthisis *originating* in Algeria is rare. 2. That the disease, especially when imported, is cured in its early stages, without medical intervention, by the sole action of the climate; and even if it be a little more advanced, it is still cured or ameliorated by the same means. 3. The chances of abolishing hereditary tuberculosis are almost certain when the children are placed under such favourable climatic conditions from infancy upwards."

Persons with other diseases of the lungs—chronic bronchitis, emphysema, and asthma—also derive marked benefit from passing the winter at Algiers; but they should not attempt the sea voyage when the heart is extensively deranged and weakened.

The climate of Algiers is not suitable to the treatment of rheumatism in any form; and I have never seen a case which derived the slightest benefit there. The hot baths at Hamman R'irha, situated among the Lesser Atlas Mountains, sixty miles from Algiers, and which are described elsewhere,[5] are eminently suited to the treatment of this complaint. The rheumatic invalid should never allow himself to be tempted by the society and attractions of Algiers to pause for more than two days in his transit to the less gay but more favourable spot. Those who go into the interior should avoid valleys not well under cultivation, since a mild form of ague is sometimes incurred in such districts.

The clothing best adapted to this climate is that worn during an average English spring. Invalids should always be provided with flannel underclothing. The amusements consist of riding and driving out of doors, tennis on tufa courts, and society. There is a large number of English winter residents, and, thanks to the geniality of the English consul, Sir Robert Playfair, there is much pleasant social intercourse amongst them. Perhaps it is the sea voyage of thirty to thirty-six hours across the Mediterranean which deters the more fashionable pleasure seekers from frequenting Algiers, and causes them to halt at more easily accessible places like Nice and Cannes. It is not generally a disagreeable sea voyage, but the only way to shorten it is by crossing from Carthagena in Spain to Oran; but travelling by railway from the latter place to Algiers is a slow and wearisome journey, albeit through a country which is one of the granaries of the world.

Paddington Infirmary, W.

[1] M. Macarthy's observations made at the Musée Bibliothèque in the centre of the town.

[2] January 2·45, February 1·34, March 3·49, April 3·1, May 1·31, June ·75, July ·03, August 0, September 2·21, October 4·43, November 4·35, and December 6·29 inches.

[3] Those who wish to study the question will find the merits of high, dry mountain air ably set forth by Dr. Hermann Weber in the Croonian Lectures of 1885.

[4] La Phthisie en Algerie d'après une Enquête Officiele par le Dr. Feuillet. 1874.

[5] St. Thomas's Hospital Reports, vols. xiii. and xiv.

CASES OF BONE DISEASE AFTER SMALL-POX IN YOUNG CHILDREN.

BY ARTHUR NEVE, F.R.C.S.E., &c.

As far as I can judge from the limited statistics available, over 75 per cent. of the population of Kashmir die in childhood from small-pox. Some of the sequelæ, such as total or partial opacity of the cornea, or destruction of the eyeball, are daily seen in our consulting-room. These are also to be seen in England, but less familiar there are the acute bone and joint affections of which I append a few examples. Cases 2, 3, and 4 occurred during the spring of this year, and the first is published with them because it is probably almost unique:—

CASE 1. *Disease of both elbow and one wrist joint; simultaneous excisions; cure.*—J——, a boy, aged three, suffered from small-pox during September, 1885. He was seen at the Mission Hospital on November 5th. Both elbow joints and the right wrist were swollen and freely discharging pus. The abscesses had burst a month previously. The child appeared strong considering the abundance of the discharge. On the same day, with full Listerian precautions, I excised both elbow joints, and freely gouged the wrist, in which the mischief was centred in the lower epiphysis of the radius. The parts were dressed on the 6th, the 9th, and the 11th. On the 9th the left elbow was found completely healed, the skin over the right elbow ulcerating a little, and the wrist wound granulating rapidly, with scarcely any suppuration. On the 19th the wounds were healed. A small abscess in the right elbow burst on December 1st, and on the 10th the child left the hospital cured, with very good movement of the arms, and having picked up strength completely.

CASE 2. *Complete necrosis of ulna; resection; cure.*—S——, a child, aged one year and a half, had small-pox in February, 1887. A month later an abscess formed behind the elbow, which burst and discharged, at first abundantly, then less. On May 18th he fell, and bone protruded from the wound. On the same day he was brought to the hospital. His whole forearm was swollen and red, and from an aperture at the back a portion of dry smooth bone, apparently the olecranon, projected. Under chloroform this was seized with necrosis forceps, the skin opening slightly enlarged, and a few adhesions separated; the whole diaphysis of the ulna was then removed. An opening was made near the wrist through the skin and through a thin case of cartilage which completely surrounded the site of the shaft. The lower epiphysis was covered with soft granulations. The elbow joint appeared unaffected. A drainage tube was drawn through the tubular hollow and dressings applied. On May 28th the drain was removed, when the cavity rapidly closed with granulations, and the limb promised to be in no way impaired in its usefulness.

CASE 3. *Necrosis of scapula; resection; cure.*—A——, a well-nourished child, six months old, was brought to the hospital on April 22nd with a sinus in front of the left armpit, from which watery pus was discharging. An abscess had first formed some weeks previously after an attack of small-pox. The scapula was enlarged, and the sinus led towards it. Chloroform was at once administered, the sinus incised sufficiently to admit the finger, and another incision made at the lower angle of the scapula. The state of things was peculiar. The finger passed inside a distended shell of semi-ossified cartilage; some thin fragments of similar material were loose in the cavity or partially adherent to the walls; and some sharp spicules projected inwards from the spine and neck. With a gouge as much as possible was removed, leaving merely the spine and neck, with the thin shell. For the first few days the cavity was well syringed out; on the 27th the drainage tube was removed from the posterior opening, which had nearly closed. There was a good deal of reaction. By the end of April the whole cavity was filled and distended with granulations, from which there was a slight sero-purulent discharge. On May 12th the wounds were healed, except for slight oozing from the sinus in the axilla; but a slight erysipelatous rash appeared, which extended in an irregular manner for a day or two, disappearing from one part to begin in another. On May 16th the parents took the child home, considering it cured.

CASE 4. *Acute suppuration of shoulder joint; incision and drainage; cure.*—A thin, weakly boy, about six years old, was brought with a large fluctuating swelling over the shoulder. He was only recently convalescent from small-pox. The swelling was not very tense, painful, or red. It was of a fortnight's duration. On April 1st the abscess was opened by a free incision, and the shoulder joint, with which it communicated, well washed out with mercury lotion, and a drainage tube inserted. He did not remain in hospital, but was brought on four or five occasions to have the wound dressed. On about the seventh day the drainage tube was found to have come out; it was not replaced, and when last seen the wound was healed and the boy gaining flesh.

The foregoing are fairly typical examples of a class of cases common wherever vaccination is not practised. So common are they here that bleeding is universally practised by the native hakims during the later stages of small-pox, with the hope of preventing the formation of abscesses! This practice doubtless swells the mortality from a disease always so formidable. Diseases of bones or joints in very young children usually take a favourable course after operation; and if the child has not been otherwise weakened by starvation or bleeding, even when the disease is the result of small-pox, the prognosis is hopeful. In Case 1 three operations of a grave character were performed on the same individual simultaneously. Owing to the softness of the bones, which could be cut with a knife, the whole operation did not take more than half an hour. Post-small-pox abscesses are frequently multiple. In my opinion they should be opened simultaneously and as early as possible, in order to allow of the constitutional state becoming favourable to cure. In Case 2 the ulna came away entire, except the lower epiphysis. The upper epiphysis is at the extreme tip of the olecranon, and was not separated. The curious point is how the joint should have escaped participating in the inflammatory process. Whatever part the epiphyses may play in primary inflammatory processes (and this is as yet not very clear), they, as a rule, play a very important part in limiting necrosis to the diaphysis of bones, as Cases 2 and 3 illustrate—a fact of which surgeons should avail themselves in the pre-sequestral stages of necrosis. This, however, is a subject beyond the scope of the present paper. The other cases require no special comment.

Kashmir.

TWO CASES OF

IDIOPATHIC INTRA-LARYNGEAL ABSCESS.

BY GREVILLE MACDONALD, M.D. LOND.

CASE I.—M. L——, a housemaid, single, aged forty, applied at the Throat Hospital on Aug. 27th, 1886, complaining of aphonia and odynphagia, which since their onset, eighteen months previously, had been steadily growing worse. There was a slight dry cough, complaints of a foreign body in the throat, and dyspnœa on ascending stairs. The laryngoscope revealed stenosis of the glottis, due to exaggerated congestion and œdema of the right vocal cord, chiefly subglottic, and of the inter-arytenoid fold. In this subglottic swelling, immediately beneath the cartilaginous glottis, was a spot of excavated ulceration, of which only the overhanging margin was visible. The left cord was congested and swollen, while the right was fixed in the cadaveric position. There was no marked change in the ventricular bands, but the aryteno-epiglottic fold of the right side was œdematous, and the arytenoid cartilage clubbed. The pharynx was anæmic, and presented three well-marked cicatrices on the posterior wall. There was no history of syphilis, although a sore throat of some weeks' duration was admitted as having occurred some fifteen years previously. The case was diagnosed as one of tertiary ulceration, upon which an attack of acute laryngitis had supervened. The localisation of the disease upon one side of the larynx pointed very strongly to some cause beyond simple catarrh. As the wards were closed for repairs, it was impossible to admit the patient. She was put upon ten-grain doses of iodide of potassium, and instructed to suck ice frequently and to inhale a weak alkaline spray every four hours. On Aug. 31st the patient's condition was much aggravated. Then respiration was stridulous, the supra-clavicular spaces receded during inspiration, and

the complexion was slightly dusky. The laryngoscopic appearances are represented in Fig. 1. The subglottic swelling had greatly increased, but receded sharply at the site of the ulceration; the margin of the right cord had almost disappeared, and the œdema of the aryteno-epiglottic fold was intensified. But the most striking alteration was the enormous swelling of the right ventricular band, which on examination with a probe appeared to fluctuate. In this swelling an incision was made on the most prominent point with Mackenzie's laryngeal lancet. Yellow creamy pus immediately welled up. The relief to the breathing was almost instantaneous, although the stenosis appeared unaltered. On Sept. 3rd the œdema of the right cord had entirely disappeared, although there remained some subglottic thickening. The iodide was continued under the supposition that the abscess might be a broken-down gumma,

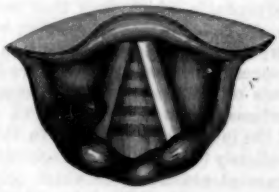
FIG. 1.

and the patient was ordered to use a weak astringent spray. From this time the improvement was continuous, and on Nov. 30th the laryngoscopic appearances, beyond a slight hyperæmia of the cords, were normal.

Little comment is called for on the above facts. The trouble being of such long duration the etiology was somewhat obscure. The abscess may possibly have been due to an acute inflammatory attack supervening upon a chronic laryngitis; if so, the chronic symptoms were remarkable in disappearing so completely during the short time the patient was under treatment.

CASE 2.—F. W——, married, aged thirty-eight, applied for relief on Jan. 4th, 1887, complaining of odynphagia, more marked on swallowing saliva than with food, a symptom which generally points to the larynx rather than the pharynx as the seat of pain. She had taken cold a week previously, since when the pain had been steadily increasing. The pharynx was normal in appearance. The laryngoscopic image is represented in Fig. 2. The whole of the right side

FIG. 2.



of the larynx was considerably congested; while, projecting inwards from the right aryteno-epiglottic fold, and resting apparently on the ventricular band, was a smooth, dull red, somewhat translucent swelling, partly concealing the vocal cord. To the probe it appeared soft and fluctuating. With the laryngeal lancet pus was evacuated, and the prominence collapsed. The pain on swallowing was immediately relieved. A benzoic acid inhalation was prescribed. At the patient's next visit, a week subsequently, all traces of the inflammatory mischief had disappeared.

This second case is quite of minor interest save from its rarity. Idiopathic laryngeal abscess is scarcely discussed by authors. Morell Mackenzie has collected thirteen cases. Of these six occurred at the root of the epiglottis, four involved the ventricular bands, and three the aryteno-epiglottic folds. Nine were opened, the remainder undergoing spontaneous rupture.

Queen Anne-street.

THE EXPERIMENTAL PRODUCTION OF CHEST TYPES IN MAN.[1]

BY G. W. HAMBLETON, L.K.Q.C.P.I., M.A.I.

WHILST engaged in research on another subject, my attention was drawn to the fact that the size and shape of the chest varied as I varied the conditions to which it was subject. I found this sequence of events was absolutely constant, and could be carried out within such wide limits that it appeared to me to prevent an insuperable objection to the present accepted theory of the inheritance of chest types.

Taking a well-marked example of the so-called inherited consumptive chest, I subjected it to conditions that tend to develop the lungs, till it corresponded in size and shape first with the town artisan, then with that of a man of the privileged class, and finally with that of a man of the best class of insurable lives in America. By subjecting that same chest to conditions that tend to reduce the breathing capacity, I brought it back through the same types to nearly that with which I commenced, and I have produced similar results on other chests within a period measured by months. At birth the average male child of all classes has the same type of chest, but at maturity he has that of the class to which he belongs. Here, too, we have one type of chest forming a series of types that have varied precisely as the conditions to which they have been subjected in those classes have varied. Further, there is evidence pointing to the same relationship between conditions of type, in which none has ventured to raise the question of inheritance. We have, on the one hand, the type of chest of those who use wind instruments, or who by their occupation require to greatly use their lungs; and, on the other, the type of those who spend their time in a stooping posture, or who compress their chests either by the instrument they use in their work or by a corset. And there is the same relationship between the size and shape of other parts of the body, and the conditions to which they are subject. We know that the head has been altered in shape by direct pressure; that the muscular and osteal systems change in size and shape according to the conditions to which they are subject; that the colour and thickness of the skin vary in like manner; that the difference between the foot of a Chinese lady and that of a woman who has never worn shoes depends upon their presence and absence respectively; that the difference between the hands and fingers of a pianist and those of a man accustomed to lift heavy weights is produced by their occupations; and that each histological element of the body is subject to the same law. Therefore I contend that the type of man after birth is solely produced by the conditions to which he is subject. Hence the formation of race by man's continuance under the same conditions and its subsequent divisions into sub-races and families by his migrations into new conditions and the minor differences therein. Hence also the difference between the same species of animals under the conditions of nature and of domestication; the difference between the same plants placed under different conditions; the difference between the products of seeds sown in different localities, and the return of man, animal, or plant to former types on being subjected to the conditions that produced that type.

This opens up a wide and most important field for our investigation. We have to ascertain what the conditions are that produce these changes in each part of man that together form a class or type. The difficulties in our way are not nearly so great as will at first sight appear. Great demonstrations are constantly taking place before our eyes of the relationship between conditions and types in those trades and occupations that are carried on around us. Let us ascertain exactly what they can teach us by investigation, and then we shall be able to compare the results with those that will be obtained in other countries. Truly, it will be a work of years, but it will give us a science of man. When we have ascertained what the conditions are that produce these differences in each part of man that together make a class or type, we shall be able to produce that class or type. Further, this investigation will also tell us what type of

[1] A paper read at the recent meeting of the British Association for the Advancement of Science.

body is best suited for this or that trade or occupation, and for residence in this or that part of the world. Then we shall train men so that we shall no longer send them into occupations with types of body unfitted for the conditions of that occupation, and consequently we shall be spared the misery and loss of those numerous break-downs from unsuitability of type that are now daily brought before us.

Manchester.

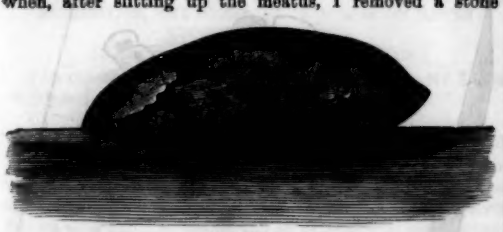
Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

REMOVAL OF URETHRAL CALCULUS OF UNUSUAL SIZE.

BY WALTER HENRY BROWN,
ASSISTANT SURGEON, LEEDS GENERAL INFIRMARY.

THE patient, a man aged thirty-six years, married, and the father of two children, came to me complaining of pain and difficulty in micturition. The condition had existed for ten years past, but had greatly increased during the last three years. He brought with him a sample of his urine, which was alkaline, offensive, and contained much pus and albumen. He had been following his employment of insurance agent up to the time of my seeing him. On examination I found a large hard swelling on the under surface of the penis, extending from the glans backwards for a distance of about three inches. He told me that the swelling had existed for some years (he could not say how many), and had gradually got larger. The meatus was closed by warty growths, and I failed to pass even a fine probe. He further informed me that he now passed urine drop by drop. Suspecting calculus, I sent him home, and later in the day had him put under ether, when, after slitting up the meatus, I removed a stone



Actual size.

weighing 265 grains, and measuring two inches and a quarter in length, and two inches and a half in circumference at its widest part. Mr. H. A. Smith, one of the house surgeons of the Infirmary, kindly made for me the accompanying sketch, which gives a good idea of the shape and size of the stone. The after history is unimportant, the man making a rapid recovery and the urine clearing within a few days of the operation.

The points of interest which occur to me are:—1. The unusual size of the stone and its position; the recorded cases of large urethral calculi mention them as having been either in the perineum or scrotum. 2. The fact of the man being able to endure the presence of this large calculus in the urethra, of its being apparently no hindrance to sexual intercourse, and, until very recently, not sufficiently painful to compel him to seek relief.

ON THE ESSENTIAL NATURE OF CERTAIN DISEASES OF THE SKIN.

BY T. FREDERICK PHARSE, M.D., M.R.C.P. LOND.

MANY will agree that too much attention is often bestowed upon the clinical symptoms and morbid anatomy of certain diseases of the skin, while the exciting or determining cause is left practically unconsidered. We notice, for example, eczema arising under a variety of conditions—such as that of rheumatism, gout, and external irritation. Nevertheless, we are apt to label the appearance "eczema" and consider we have got a distinct pathological process. In one sense, perhaps, we may be said to have a particular type of structural change in the eczematous group and another distinct change in the psoriasis group, but my contention is that just as the word "dropsy" only conveys a very general meaning of a patient's condition, so the terms "eczema" and 'psoriasis" similarly designate but groups of symptoms without definite pathological indications. We recognise a gouty bronchitis, and ought to treat it as for gout, and not as an inflammatory affection. When we recognise the gouty eczema, there is too much tendency to treat the local condition, and not to pay sufficient regard to the gouty state upon which the local changes depend. To take another example. At one time the joint affections of acute rheumatism, though admitted as part of a general state, were thought to require combating by local treatment. Now, however, we have found that the joints themselves require no local treatment whatever, and that we relieve them by overcoming the rheumatic process upon which these and other symptoms depend. Those who are engaged in the study of diseases of the skin will have come across cases of eczema which remain unrelieved, or at any rate uncured, by any local application, but which rapidly recover by the internal administration of the salicylates of hydrogen or soda. In these cases we may have a local state exactly similar to all intents and purposes to that arising from gout or other causes, but there is a distinct pathological process which we know as rheumatism underlying it. I am quite confident that there are other cases, again, termed "eczema" which are dependent upon influences from the nervous centres. We recognise that a very large number of cases of eczema are associated with some kind or other of intestinal disturbance. Many of these we treat successfully, but there are others in which we do not get at the *fons et origo mali*, and which remain an opprobrium to our art. Much the same may be said of other groups besides the eczematous. We know the cause of many diseases of the skin, but what I wish to lay stress upon is that though the terms "eczematous," "lichenous," "herpetic," "furuncular," &c., applied to groups of symptoms, may be useful for instruction, they are absolutely misleading if considered as distinct pathological processes, requiring a special line of treatment for each. Just as we call a particular form of joint affection an "arthritis" and a collection of serum in the tissues "dropsy," so ought we to apply the term "eczema" merely to certain clinical appearances of the skin.

I am quite aware that there is nothing new in the above remarks to sanction them for public print, but my object in bringing them forward is to advocate a classification and nomenclature based upon the etiology of diseases of the skin, rather than upon groups of symptoms or morbid anatomical changes. At some future date I hope to be able to suggest a classification founded on these lines.

Manchester-square, W.

A CASE OF FRACTURE OF SKULL; TREPHINING; RECOVERY.

BY A. J. POPERT, M.R.C.S.

ON the afternoon of June 3rd, a young farm labourer, whilst "skylarking" with other lads in a stable, fell, and was kicked on the head by a horse and rendered unconscious. He was dragged out of the reach of the animal's hoofs, but remained insensible for about ten minutes, when he slowly regained consciousness, and was carried into the neighbouring farmhouse. I saw him about two hours after the accident. His condition was then as follows. He was conscious, suffering apparently from shock; very pale; temperature 97·5°; pulse 48; and he was bleeding from a ragged wound in the scalp about the region of the middle of the anterior border of the right parietal bone; there was no paralysis. An examination of the wound by the finger discovered a sharp edge of broken bone about half an inch long, with depression of neighbouring bone. My brother, Mr. Alfred Popert, who saw the patient with me, and who all through the case rendered me much assistance, agreed that the trephine was indicated, not so much with a view of raising the depressed bone as to remove the loose fragments and splinters which the concentrated localised nature of the blow rendered probable. Accordingly the patient was anæsthetised, the scalp wound enlarged, and the injured

bone exposed. The depressed surface was less evident to the eye than to the finger, and, indeed, the whole extent of damaged external plate was comparatively trifling—a sixpenny piece would have covered it; but on raising the circular disc, loose fragments of the inner table were found in every direction round the wound. In all, twenty-three pieces were removed; some with extreme difficulty, for more than one piece was found too large for extraction through the trephine-hole, and had to be cut with bone forceps; and several sharp spiculæ had penetrated the dura mater and were sticking firmly in it. The scalp was sutured and the wound lightly dressed with dry lint. The patient, who bore the operation and somewhat prolonged administration of chloroform extremely well, was then carried home (about two miles) on an improvised stretcher, and put to bed in a dark room. His progress to recovery was uninterrupted, the treatment being low diet and quietude. In eleven days the scalp wound had almost entirely healed, with scarcely a trace of suppuration, and in fourteen days from the receipt of the injury the patient was up and convalescent; since then he has been an intelligent member of an ambulance class I organised in his village. He wears a vulcanite plate as a protection over the scar; but the dense and strong cicatricial tissue which is rapidly forming will probably of itself soon afford all protection necessary for what the patient facetiously calls the "only soft spot in his head."

The interesting features in the case are (1) the very slight damage sustained by the external table of the skull when compared with the condition of the inner; the separated pieces of the latter weighed 130 gr., and covered a superficial area greater than that of a five-shilling piece; (2) the entire absence of symptoms of intra-cranial mischief, except the immediate insensibility due to concussion. The temperature never rose above 99°, though the dura mater was lacerated in several spots. The circumstances of the operation were somewhat unusual, the patient lying on a low and narrow settle fixed to the wall in a badly lighted farmhouse kitchen, and the only available nurse a gamekeeper. The case bears an interesting similarity in some particulars to one that came under my observation when house-surgeon at our local infirmary, and which I reported in THE LANCET at that time. In that case, which ended fatally, the blow was concentrated on one spot, having been administered by a lusty Irishwoman with the knobby end of a kitchen poker. There being no urgent brain symptoms, and not very distinct evidence of depression and comminution of bone, the expectant treatment was adopted, but the necropsy revealed abundant evidence of meningitis, cerebral abscess, and a depressed comminuted fracture with very sharp edges.

Southport.

ANTISEPTIC MIDWIFERY.

By AMBROSE E. L. CHARPENTIER, M.B.

IT is with much pleasure I see the increasing interest taken in the above subject, and notably Dr. W. A. Duncan's most instructive paper on the "Accidents of Parturition." As one practising antiseptic midwifery, I beg to offer one or two suggestions, chiefly as to the means of carrying it out in ordinary practice.

Though not presuming to write "as one having authority," I would submit that there should be some additions in the "antiseptic" midwifery bag. It should contain as usual: forceps, catheter with tubing, syringe with uterine tube, pocket case, elastic or linen bandages for "auto-infusion" in case of collapse from hæmorrhage, hypodermic syringe, stylet, minim measure, and, advantageously for the safety of the patient and one's own comfort, a small nail-brush in metal case. There should be spaces for at least nine bottles; the six would contain, as in ordinary use, chloroform or the A C E. mixture, ergot, ammonia, ether, opium, and iron. In the others there should be—(1) A solution of chloral hydrate, twenty grains of chloral in a drachm of syrup of ginger or orange. (2) Bichloride tampons, carbolic acid, or a solution of bichloride of mercury, made by dissolving 160 grains of the salt in four ounces of spirits of wine; one drachm of the solution in a pint of water forms the 1 in 2000 lotion. I find this solution superior to the tampons; it is always easily prepared, is less bulky and less expensive. (3) An ointment of bichloride and vaseline (1 in 500), which is conveniently carried in a wide-mouthed bottle.

As regards the actual work, there is but little more trouble and a great deal more satisfaction than in the old happy-go-lucky method. In the syringing, a china tooth-brush tray, or soap-dish (almost always to be found), answers well to catch the escaping fluid when held close to the nates, the patient lying on her side in the usual position. This is easily done without any elaborate or expensive apparatus.

The universal practice of antiseptic midwifery cannot be too strongly insisted upon, and no trouble or anxiety on our part should be too great to prevent the horror of a case of septicæmia; and when we see by the mortality tables of puerperal women, as given in Kucher's excellent book on the Puerperal Diseases, that 10 to 18 per cent. of lying-in women die of puerperal diseases, and of these septicæmia claims 75 per cent., it is truly lamentable, and it should require no further incentive to urge us to make every effort to reduce such a terrible death-rate.

Uxbridge.

LODGMENT OF A TOOTH-PLATE IN THE GULLET FOR FIFTEEN MONTHS.

By HENRY E. BRIDGMAN, L.R.C.P.I.

AT 2 A.M. on April 17th, 1886, Thomas H——, aged twenty-eight, was brought to my surgery. He informed me that he had gone to bed, as was his habit, wearing a small plate, to which were attached four false teeth. He awoke, feeling the plate slipping into his throat, and he could, he said, still feel it at the top of his gullet. The patient was nervous and excited; he frequently retched, and expectorated blood-stained saliva; dyspnœa and dysphagia were marked. I examined the pharynx carefully with the finger, but failed to feel any foreign body. With a pair of throat forceps I seized something that I believed to be the plate, but on making an attempt to withdraw it, the dyspnœa increased, the patient struggled, and the forceps slipped. After several

fruitless attempts to seize the plate a second time, I desisted, and sent my patient to the Burton-on-Trent Infirmary. There probangs were passed into the stomach without meeting with any obstruction. The patient was watched for a few days, and then discharged, the dyspnœa and dysphagia having disappeared.

I saw the man a few weeks afterwards, when he was again suffering from dyspnœa, had a hard, frequent cough, and was expectorating copiously a tenacious mucus, tinged with blood. I continued to see him from time to time until Christmas, 1886. On July 25th, 1887, he presented himself again at my surgery, bringing with him the plate with false teeth attached, of which I enclose a sketch, saying that he had continued much in the same condition as when I had last seen him, being frequently unable to go to his work on account of cough and difficulty of breathing, until July 21st, when, being rather worse than usual, he felt, after a violent fit of retching, something in the back of his throat, when, by means of his thumb-nail, he hooked out the false teeth, which he brought with him and which he had lost just fifteen months since.

Burton-on-Trent.

SEPARATION OF THE EPIPHYSIS OF THE SECOND METATARSAL BONE.

By JAMES MASON, L.R.C.P. ED.

THIS accident, though anatomically fairly likely to happen, as a matter of fact seldom takes place—at least I can find no written note concerning a case. On this account chiefly I think the following worthy of recording.

A girl, aged seventeen, came to me complaining of pain and swelling over the root of the second toe of the left foot. She stated that the "lump" had been there for some time; it occasionally disappeared when she put her foot in a certain position, but immediately she tried to walk it reappeared. I found on examination that it could be easily reduced, but it as readily returned to its old position when pressure was removed. The movement at the joint was perfect. Well-marked crepitus could be felt about a quarter of an inch behind the joint. The fragments were put in apposition and a pad applied. A strange feature is the patient having been able to walk about for so long a time. She could not remember having received any injury or twist, and considered it simply an "enlarged joint."

Kingston-road.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

MIDDLESEX HOSPITAL.

TWO CASES OF DISEASE OF THE THYROID: ONE TREATED BY EXCISION, THE OTHER BY INJECTION OF IODINE; RECOVERY; REMARKS.

(Under the care of Mr. HENRY MORRIS.)

FOR the report of these cases we are indebted to Mr. Roger Williams, surgical registrar:—

CASE 1. *Hypertrophic goitre; thyroidectomy; recovery.*—The patient, a moderately nourished, fair-complexioned, and cachectic-looking girl, aged fourteen, from Dorking, was admitted on June 27th, 1884, with a large swelling in the thyroid region. She complained of being subject to very severe attacks of dyspnœa and of difficulty in swallowing. At night she was often disturbed by dyspnœal attacks. There were no signs of Graves' disease. Both tonsils were somewhat enlarged, and the lymphatic glands of the neck were normal. The swelling on the right side of the neck was the size of a very large orange, and reached from just below the hyoid bone to the sternum; that on the left side was not larger than a Tangerine orange. These lateral enlargements were connected by a swelling over the front of the trachea in the region of the thyroid isthmus. The mass moved with the windpipe during deglutition. It felt elastic, lobulated, and circumscribed, but there was no sense of fluctuation. At the upper part of each lateral swelling a large pulsating artery could be seen and felt. She gave the following history. Four years ago a swelling was first noticed in the site of the present disease, chiefly on the right side. It had since steadily increased, but more rapidly of late. During the last year she had been subject to severe dyspnœal attacks, especially during the night and after making any exertion. For some months she had suffered from increasing difficulty in deglutition. Her previous health had been good, with the exception of an attack of bronchitis four years ago. Her mother and sister, when young, both suffered from thyroid enlargement, which at length subsided. The sister's was frequently painted with iodine. Father, aged fifty, healthy. The family (five in number) are all healthy except the patient.

The symptoms becoming aggravated after the patient had been in the hospital a few weeks, it was decided to excise the thyroid. This was done on July 12th in the following manner: The patient being anæsthetised, an incision through the skin and fascia was made in the median line of the front of the neck, from the pomum Adami to within a little of the top of the sternum. The thin fascial investment of the gland was kept intact. The right superior thyroid vessels were exposed by reflecting the structures overlying them, and were ligatured with their sheath just as they entered the thyroid. The fascial investment was then cut through and the gland enucleated, the vessels at each of the other angles being seized by forci-pressure forceps and divided in the course of the enucleation, not before it. The vessels were of great size, and there was considerable venous hæmorrhage, quickly controlled, immediately after ligaturing the first set of vessels. Great care was taken not to drag upon the larynx and trachea, and there was no dyspnœa or suffocative effect throughout the operation. The growth proved to be a hypertrophic goitre. The wound was dressed with lint steeped in terebene oil and carbolic gauze.

The evening after the operation the temperature went up to 102·2° F.; on the following morning it was 100·8°; subsequently it remained nearly normal. The recovery was very rapid. She left the hospital convalescent six weeks after the operation, free from any impairment of voice, respiration, or deglutition. She was seen by Mr. Morris in January, 1885, quite well, and better than she had been for a long time previous to the operation. In June of this year (1887) Mr. Horace Chaldecott, of Dorking, reported that he had seen her frequently about the neighbourhood, that she looked and was quite well, and that she certainly had no symptoms whatever of myxœdema.

CASE 2. *Hypertrophic goitre; repeated injection of tincture of iodine; recovery.*—Jessie O——, aged seventeen, a short, dull and heavy-looking girl, was admitted on Sept. 10th, 1884, with a simple hypertrophy of the thyroid. She first had difficulty in swallowing, and noticed a swelling in the thyroid gland ten months ago. It had been growing very fast just previously to admission. No other member of her family has bronchocele, and she knows of only one other person in the neighbourhood in which she lives (Bovey Tracey, North Devon) with a similar swelling to her own.

On admission there was a large and regular swelling of the thyroid gland. Each lobe was equally enlarged, was solid, but semi-elastic to the touch. The swelling reached almost down to the sternum, and the circumference of the neck at the most prominent part of the swelling was fourteen inches. When she swallowed, the tumour rose with the larynx. She had some pain in swallowing, and had not taken any solid food for three months. Her speech was very low and indistinct. She had occasionally some dyspnœa, generally worse at night. There was a little albumen in her urine. She had menstruated regularly since fourteen years of age. The treatment adopted was the injection into a different part of the goitre of fifteen minims of tincture of iodine every other day, from Sept. 18th up to Oct. 17th; after this, twenty minims every third day till she left the hospital on January 14th, 1885.

On April 23rd, 1885, Mr. Goodwyn, of Bovey Tracey, South Devon, wrote in regard to the patient: "She now suffers from no pain or difficulty in swallowing. Her goitre is decidedly diminished in size, hard, and non-pulsatile. The right lobe is somewhat bigger than the left. The circumference of the neck at the level of the seventh cervical vertebra, and over the most prominent part of the goitre, is twelve inches and a half. She is not obviously anæmic, but she had hæmic bruits over the base of the heart, and suffers from breathlessness on exertion. She seems to have brightened up mentally from her stay in London."

Remarks by Mr. MORRIS.—These two cases, which happened to come under observation within a few months of one another, illustrate the very different treatment required for different instances of the same form of bronchocele. Both of them were cases of simple hypertrophy, which is the form of goitre least prone to give rise to serious symptoms, and most amenable to improvement from internal and topical remedies; which sometimes contracts and becomes transformed into a firm fibrous or calcified fulness; or which may spontaneously and completely subside down to the dimensions of the normal thyroid. In both these cases the disease had reached a stage at which it had been for some time seriously affecting the health of the patients, and that, too, at an age when simple hypertrophy is not generally wont to be more than a disfigurement at most. In spite of treatment by their respective medical attendants, these young girls had continued to grow worse—to suffer increasingly from dyspnœa,

dysphonia, and dysphagia; and one of them—she whose case is first recorded—had even her life threatened by the disease. Though the rate of growth in the second case was rapid, the fascial tissues of the neck had yielded sufficiently to prevent the occurrence of those very alarming symptoms which are commonly excited by acute hypertrophy of the gland. Indeed, though the change in the voice and the difficulty of swallowing solids were very marked, we had no immediate fear for the life of the girl, whilst the character of the tumour offered every inducement to try the injection treatment, which happily effected such a good result. That the improvement which followed the injection of iodine was really due to the treatment is proven, I think, by the rapidity with which the hardening and contraction of the gland followed the injections, and by the fact that these changes occurred exactly at the parts injected, and progressed therefrom. We thus cannot, I think, for these reasons, impute the result to any gradual and spontaneous transformation of the tumour from the simple or cystic to the fibrous form of the disease.

In the first case, the severe and frequent dyspnœa, not only on exertion but during rest and at night, the increasing difficulty in deglutition, the general feebleness of the patient, and, lastly, the aggravation of these symptoms during the three weeks she was under observation in the hospital, pointed to the necessity of early and efficient treatment, if her life was to be saved. The danger of these attacks of dyspnœa coming on suddenly, their fatality, and the disadvantages against which the surgeon has to contend when he has to operate on an emergency in the night, are well illustrated by Mr. Pitts in a record of three cases, in the Pathological Transactions, vol. xxxiii. p. 364. Moreover, the soft and elastic character of the swelling, together with the forcible pulsation of the feeding arteries and the evident large size of the vessels in the gland, seemed to exclude incisions, caustics, subcutaneous laceration, and the various injections; whilst our comparative ignorance of the value of electrolysis and galvano-puncture in this disease, the uncertainty and known dangers of setons, and the futility of the ligature of the thyroid arteries, left as the only alternatives excision of the isthmus and the removal of the whole thyroid. The latter was preferred as being absolutely certain in its immediate result, and because it was not contra-indicated by adhesions between the tumour and the great vessels of the neck, nor by extension of the growth downwards behind the sternum. The object in putting the case of thyroidectomy on record is because now, at the end of three years, the girl is in good health, and shows no sign whatever of any threatening of myxœdema, and because it adds another instance from which the committee of the Clinical Society, at present engaged on the subject, will draw their conclusions.

AYR COUNTY HOSPITAL.

HERNIOTOMY TWICE WITHIN THREE MONTHS.—NECROSIS OF RIB.—AMPUTATION OF ARM IN AN OLD MAN.—IMMENSE HYPERTROPHY OF HEART.

(Under the care of Dr. NAISMITH, F.R.C.S.E. (Exam.).

For the following notes we are indebted to Mr. F. G Clemow, M.B., C.M. Edin.

Strangulated umbilical hernia; two operations within three months.—Mrs. W——, aged forty-seven, housewife, an immensely stout woman, was admitted on May 26th, 1887. For fifteen years she had been the subject of an umbilical hernia. In February last it became strangulated, and was operated on in the Glasgow Royal Infirmary. After this it did not reappear till three days before admission, when it suddenly developed, and seems to have become rapidly strangulated, as vomiting and abdominal pain came on during the night. The vomiting continued at intervals, and was stercoraceous on the morning of admission. There was no motion of the bowels.

On admission there was a remarkable absence of pain, collapse, or anxiety. Temperature normal; pulse 93, and steady. Tongue soft, moist, and furred. In the position of the umbilicus was a tumour four inches and a half in its long—i.e., transverse—diameter, tense and elastic. The skin over it was red and thin, showing the V-shaped cicatrix of the former operation.

On the day after admission there was the same absence of urgent symptoms; but the hernia was still irreducible. Slight bilious vomiting, not fæcal.

On the following day, May 28th—i.e., the fifth day from the reappearance of the hernia,—stercoraceous vomiting with severe pain recommenced at 5 A.M., and at 11 A.M. Dr. Naismith operated. A single median incision was made, commencing on the abdomen above the tumour, and ending on the centre of the latter. The coverings were very thin. With some difficulty the constricting neck was divided at the upper part, with immediate relief of tension in the tumour. The sac was not opened. Owing to extensive adhesions the hernia could not be entirely reduced. Two hours later the bowels were moved, and again at 2.30 A.M. Vomiting ceased three hours after the operation.

Nourishment was given per rectum for two days, when digested food was retained by the stomach. The temperature never rose above 101·4°. The patient left the hospital on July 7th, having recovered without any interruption. A specially made belt, with cup-shaped shield, was procured for her.

Remarks by Dr. NAISMITH.—The history of this case shows that after the first operation in Glasgow the woman did not on recovery have recourse to the use of a truss or any supporting apparatus whatever. It is manifest that had the usual precaution been followed, a second operation would not, in all probability, have been rendered necessary. Before section, I need hardly add, the usual palliatives of opium, ice applications, and elevation of the lower half of the body received a fair trial.

Necrosis of rib; removal of a large sequestrum.—A. M——, aged twelve, for some years had had a sinus over the right fifth rib, with constant discharge; no cause could be assigned. A probe detected dead bone with an indistinct sensation of mobility. On May 19th, under chloroform, a small incision one inch long was made, and with dressing forceps a necrosed portion of rib five inches long was removed with slight manipulation. This sequestrum consisted of the inner surface of the rib, from which the outer surface had been more or less completely eroded. She remains in the hospital with a slowly healing sinus.

Remarks by Dr. NAISMITH.—This case was discharged cured, I believe, in the latter end of July, or more than two months subsequent to the operation. I would draw attention to the length of the necrosed portion of rib which was extracted.

Amputation of arm in a man of seventy-three.—T. N——, aged seventy-three years, was admitted on May 17th, 1887, with diseased elbow joint of five years' standing; the joint was quite disorganised with offensive discharge from two sinuses; there was considerable constitutional disturbance and great weakness, with evening rise of temperature. On May 20th the limb was removed through the middle of the upper arm by antero-posterior flaps; scarcely a drop of blood was lost. His recovery was remarkably rapid, the wound healing largely by first intention. The temperature returned to normal on the night of the operation, and only rose twice afterwards to 100°. He left the hospital on June 18th, with the wound almost healed, and his general health completely restored.

Immensely hypertrophied heart.—J. L——, aged twenty, was admitted with extreme symptoms and signs of mitral stenosis and incompetence, with great dilatation and hypertrophy. He died on July 5th. The heart was found to weigh twenty-four ounces and a half, the hypertrophy of the left ventricle being enormous. The mitral valve was excessively distorted and calcareous, extremely stenosed, and incompetent.

JULLUNDUR STATION HOSPITAL.

FATAL CASE OF EXTERNAL URETHROTOMY.

(Under the care of Surgeon-Major STEVENSON, M.S.)

J. F——, aged nineteen, a private in the Connaught Rangers, was admitted on Oct. 23rd, 1885, for stricture of the urethra. He had just arrived with a draft from England. The account he gave of himself was that six months previously he had fallen on a fender in his barrack room, striking his perineum on a sharp corner of the iron. Immediately after the accident he passed blood by the urethra. For this he was treated in hospital and had instruments passed. He was in hospital on board ship on the voyage out to India for stricture, but it is noted in his medical history sheet that no instrument could then be passed into the bladder.

On admission some attempts to pass an instrument through the stricture were made, but without success; and he was

treated by rest in bed and hot baths in the hope of introducing a catheter into the bladder later on; but all subsequent efforts in this direction failed. When first seen the stream of urine was small, but continuous; soon, however, the contraction of the stricture became so extreme that urine passed only by drops, and later still there was the constant dribble from an over-distended bladder. The urine was of high specific gravity (1030), clear, acid, and free from albumen. Under these circumstances operative interference was imperative, and the following procedure was carried out on Nov. 19th. An incision, one inch and a half long, was made in the middle line of the perineum on to the point of a No. 10 leaden bougie which was being pressed against the front of the stricture. The lower end of this incision was within half an inch of the anus. On opening the urethra a fine leaden bougie was passed (replacing the larger one), and its point bent up at an acute angle (no Wheelhouse's hook being at hand) so as to hook up the urethra at the upper end of the wound. The cut edges of the urethra being held aside, attempts were made to pass the point of a fine probe-pointed director through the stricture, but, although perseveringly persisted in, failed of success. Under these circumstances the performance of Cock's operation of opening the urethra behind the stricture became necessary. This was accordingly done, and a No. 10 silver catheter passed into the bladder from the meatus. The urethra behind the stricture was found to have become enormously dilated. The wound was dusted with iodoform and covered with carbolised oil on lint, with a padding of absorbent carbolised cotton wool outside. The operation occupied about an hour, and at it, and in the decision to perform it, Surgeon-Major Stevenson was assisted by Surgeon Pink, M.S., and Surgeon Dyson, F.R.C.S.

On the evening of the day of operation the man seemed to be doing well; the bladder was being freely drained; there was no pain. Temperature 100·2°. On the morning of the next day the temperature had gone up to 103·0°, but the man appeared to be doing well; he had no pain; the urine was being passed freely through the incision. The catheter was removed, and the wound, which was looking healthy, re-dressed in the same manner. He had taken opium pill (one grain) and had slept fairly well. On the evening of the second day he felt comfortable; drainage free; some urine had passed by the meatus; no pain or tympanites, but the temperature was 104·0°; bowels opened once. During the night, at about 12 o'clock, he became restless and uneasy, but he had no pain. Later on symptoms of collapse suddenly set in; he became cold, blue on the surface, and pulseless, and the temperature went down to 97·0°. At 7 A.M. on the third day these symptoms were most marked, and stimulants and the external application of heat had no restorative effect. The patient died at 9 A.M., about forty-six hours after the operation, evidently of acute septicæmia. He had passed urine freely during the night. The wound looked sloughy and grey in colour, but this unhealthy appearance had come on quite recently.

At the necropsy, six hours after death, the left lung was found to be adherent at the upper lobe from recent pleuritis, and œdematous and congested at the apex; right lung much congested and œdematous; recent red pleuritis at the front of the middle lobe. Spleen red and friable. There were effusions into all the serous cavities, and the stomach, intestines, pericardium, and pleuræ showed patches of congestion and ecchymosis. The bladder was small and contracted, and its walls enormously hypertrophied and hard; they were quite an inch in thickness; its mucous membrane was in folds, and showed many spots of ecchymosis. At the neck of the bladder, on the floor of the urethra, was a small false passage, a band of mucous membrane stretching across the urethra, as though a loose fold had been hitched up on the point of a catheter or sound and been pierced. The urethra behind the stricture was dilated to about the size of a man's thumb. The kidneys appeared healthy, and the ureters were not at all dilated.

Remarks by Mr. STEVENSON.—Why should this case have developed septicæmia? All antiseptic precautions possible in the treatment of a wound in the immediate neighbourhood of the anus were strictly adhered to; iodoform, carbolised oil, and absorbent carbolic wool were used as dressings; the instruments used at the operation had been kept in a 1 in 20 carbolic lotion for an hour or more previously, as were also the sponges; and the parts operated on had been thoroughly purified. Must the case be entered under the heading lately referred to in THE LANCET, and put down as a "surgical mishap"? Or may the catheter be to blame? The one passed into the bladder had been for some time in a 1 in 20 carbolic lotion, and it was lubricated with carbolic oil, but a catheter is an instrument of which it is difficult to guarantee the purity in a Listerian sense.

Reviews and Notices of Books.

Elements of Physiological Psychology. By GEORGE T. LADD, Professor of Philosophy in Yale University. Pp. 696. London: Longmans, Green, and Co. 1887.

THE prospects of psychology have of late years greatly brightened, for the advances of anatomy and physiology which are now carefully studied by psychologists, are at length beginning to bear fruit. No doubt much knowledge in regard to the laws of thought, the sequence of ideas, and intellectual phenomena generally, may be obtained by introspection, but so long as philosophers were contented, like the spider, to spin their theories from their own bodies instead of appealing to experiment and observation, no progress could be expected. Their reasonings resembled an inverted cone wanting its proper base to stand upon. The very title of the book before us, written by one of the ablest teachers in one of the best colleges in America, shows it is now understood that the study of the phenomena of the mind may and ought to be approached only by those who have obtained a competent grasp of the material substratum through and by which such phenomena are exhibited, and that a knowledge of the chemistry, the physics, the anatomy and physiology of nervous tissue, is a necessary preliminary to elementary conceptions of its mode of working. The number of workers on these subjects and the value of the memoirs published have greatly increased in the course of the last few years, and the mass of material which has accumulated will best be appreciated by anyone who will take the trouble to turn to the pages of, amongst many others, the volumes of Pflüger's "Archives" and the volumes of Hoppe-Seyler's "Physiologische Chemie."

It is not surprising, then, to find in Prof. Ladd's treatise the first two parts embracing 584 pages, out of a total of 688, devoted entirely to an account of the structure and functions of the nervous system, that might take a place in any modern work on physiology, the last part only being occupied with the Nature of Mind. A great defect is, however, still observable in the mode in which psychology is cultivated—namely, the entire omission of the consideration of the faculties of the lower animals, and the mode in which mental attributes undergo evolution. Nature must be long and curiously questioned in this direction before clear answers can be given to many psychological questions. How can we expect to explain the action of the complex apparatus of man and the higher mammals when we are still ignorant of that of the lower fish and the humbler reptiles?

The most interesting section of the volume before us is that which deals with the nature of mind. Dr. Ladd reasonably insists upon the unsatisfactory character of the statement sometimes made that the phenomena of consciousness are the product of the brain, if by this is meant that thought and intelligence bear the same relation to this organ that the bile does to the liver. No doubt molecular changes occur in every act of thought; but in order to "hold that mental phenomena are related to the substance of the brain in the same way as that in which the nerve commotions or molecular changes are related to this same substance, we must identify mental phenomena with molecular changes." But it is at present "impossible to identify the two classes of phenomena as phenomena"; and he goes on to show that even if it be admitted that different sensations

may hereafter be shown to be the result of the mode of motion of the waves of nervous excitation, yet that a collection of such sensations resulting from the excitations of the brain by no means constitute a real "thing." Each "thing" implies not simply a vast number of moving physical molecules on the kind and amount of whose motion the phenomena of conscious sensation are dependent, but a uniting energy and a unity in mind. 'Fifty million molecules, even when they are highly complex and unstable phosphorised compounds, gyrating in the most wonderful fashion with inconceivable rapidity, certainly do not constitute *one thing*. They do not by molecular constitution and activities even constitute a physical basis which is conceivable as a representation or correlate of one thing." It is not surprising to find that Professor Ladd holds strongly the opinion that the mind is a real entity, "a real being which can be acted upon by the brain, and which can act on the body through the brain." This, he thinks, is the only assumption that is compatible with all the facts of experience. The earlier chapter in which this difficult subject is handled is worthy of careful perusal.

In concluding this brief notice of Professor Ladd's work, we may observe that it affords evidence of wide reading, and that the facts he has gathered from many quarters are lucidly stated and brought very appropriately into relation with each other, and the whole treatise may be read with advantage by the side of Spencer's "Elements of Psychology." We may add that it is excellently printed, and when requisite for the illustration of the subject good woodcuts are introduced.

Notes on Anæsthetics; with an Appendix, Illustrative Cases, and Engravings of Anæsthetic Apparatus. By ARTHUR S. UNDERWOOD, M.R.C.S., L.D.S. First Edition. London: Claudius Ash and Sons.

Guide to the Administration of Anæsthetics. By HENRY DAVIS, M.R.C.S. London: H. K. Lewis.

CURIOUSLY enough both these little volumes claim Mr. Woodhouse Braine as foster-father. Mr. Underwood disclaims any special knowledge of the matters with which he deals, protecting himself against adverse criticism by the avowal that he has committed his proofs to Mr. Braine. However skilled and well versed in anæsthetics a man may be, it is of course impossible to compress into fifty-two small heavily leaded pages the wide subject of artificial anæsthesia; yet Mr. Davis has attempted to do this, while Mr. Underwood has given us seventy pages, with another forty pages of appendix. Sins of omission in both books are too plentiful for us to enumerate, and so we will dismiss them with an expression of regret that works professing to be guides to one of the most important and responsible duties which a medical man can be called upon to perform, should pass into circulation with so meagre and wholly inadequate an account of artificial anæsthesia, its promotion, dangers, and difficulties. Mr. Underwood in his preface says he has "no fear that the following pages will be found to lack the wisdom that is born of experience, or to contain matter that is in any sense unpractical." Whether readers of the book will be able to take so hopeful a view of the case we very much doubt. Throughout we notice an absence of method in arrangement, as well as an entire want of any practical rules such as might serve to explain to a novice how he should set about giving an anæsthetic. Besides this looseness of compilation (for Mr. Underwood naïvely tells us he has only adopted the work of other writers without having any pronounced views of his own), there is an absolute inaccuracy in many of his statements—such, for example, as that chloroform is at present the anæsthetic most frequently employed for prolonged operations. The best chapter is that dealing with nitrous oxide, a matter with which Mr. Underwood as a dentist is presumably most acquainted. Mr. Braine's paper, read before the Medical Society in 1884, is largely under contribution for the chapter on ether, while directions concerning chloroforming are mainly taken from Sir Joseph Lister's papers published respectively in 1861, 1870, and 1882. Paul Bert's experiments are detailed, but no mention is made of the now universally recognised fallacies underlying the whole of his research. The teaching in this chapter is, we think, most dangerous, and is out of accord with our present knowledge. Thus, Mr. Underwood says: "The general result of all these experiments" (Bert's and Payrand's—whose method, by the way, was anticipated in this country) "from the days of Snow down to now seems to point to the fact that there is *little or no danger of cardiac syncope* during the careful administration of chloroform" (the italics are ours); "still there are dangers, for many deaths have been recorded." These dangers are said to be fright, shock, and overdosing. And the chapter concludes: "Chloroform is not specially dangerous unless given in too strong a dose." Surely the special danger lies in the fact that it is so easy to give an overdose! Clover, perhaps the most expert administrator of this country, met with deaths even when employing his method, whereby only a vapour below 4·5 per cent. was inhaled; and yet Mr. Underwood asks us to believe that chloroform only "becomes dangerous if the ordinary precautions laid down are neglected."

Mr. Davis undertakes more than the author of the "Notes," making mention not only of the three common anæsthetics, but devoting thirty-six lines to methylene, ethydene dichloride, and anæsthetic mixtures, and nine pages to cocaine. We cannot agree in the opinion expressed in favour of Ormsby's inhaler, as that instrument transgresses every canon of successful ether-giving. Dr. Ormsby certainly never intended, as stated by Mr. Davis, to improve Clover's inhaler—indeed reference to his original paper shows this. Mr. Davis's preference for Ormsby's inhaler may explain his curious statement that "children are readily asphyxiated by ether." We hope many children have not suffered this terrible death; certainly no record has, in our knowledge, been made of such an untoward result of etherisation. Mr. Underwood gives us to believe that chloroform kills by arresting respiration through paralysis of the arytæno-epiglottidean folds; Mr. Davis ignores such a possibility, and informs us that chloroform kills by syncope, although he admits "the respiration serves as an excellent guide to the patient's condition." Spasm of the glottis is said to be sometimes caused in nervous persons by their voluntarily holding their breath; this is not usually accepted, and we should regard such a theory as untenable. Turning to the practical side of anæsthetics, we are surprised to find Mr. Davis advocating the administration of nitrous oxide gas two or three times in succession—a practice which we believe other anæsthetists regard as harmful and likely to cause headache and malaise. We regret that the author of this little manual has not given himself a fair chance of penning, concisely if he will, yet adequately, the essentials of anæsthetic administration.

ACCIDENTS IN THE ALPS.—It is stated by a Swiss newspaper that this year's death roll in the Swiss Alps is an unusually heavy one. In the short space of not quite a month 22 tourists met with accidents, of whom 18 were killed. The accident on the Jungfrau (canton of Bern) involved the loss of six lives; that on the Falkniss (Granbündten) three. One life was lost in each case in the accidents on the Morteratsch glacier (Granbündten), Molesa (Waadt), Gantrist (Bern), Leissigergrat (Bern), Säntis (Appenzell), Kaisereck (Freiburg), Dent de Corjan (Waadt), Schächenthal (Uri), and Diablerets (Wallis). There were no guides among the 18 killed, and only too many persons made ascents without guides. The four injured persons were all tourists.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 24, 1887.

THE success of the Ninth International Medical Congress is a matter for thankfulness. The interruption of the series of Congresses would have been little less than a calamity and a disgrace for the profession in all nations. Any serious imperfection in the meeting, either as respects numbers or the character of the discussions, would have been but little less unfortunate. But the Congress has been held under most honourable auspices; the famous hospitality of the United States has been fully realised; and those who went great distances to attend the Congress have been amply rewarded, and will return to their various countries and duties with higher impressions of their calling and deeper convictions of its progress, both on its scientific and its medical side. We cannot but rejoice that our own country was well represented in many of the Sections; the names of many well-known English physicians and surgeons will have been noticed in the reports which were received by cable from our special correspondents at Washington. We confess that we read the report of the concluding proceedings of the Congress with the most pleasurable emotions, and not least the remarks of the English members. A break-down of the Congress in Washington would have been only a less acute pain to us than a break-down in London. And we accept the concluding speeches of our countrymen and of our *confrères* of Berlin and Paris, Dr. MARTIN and Dr. LANDOLT, and others, as proof that the Congress has been worthy of its predecessors, that it contained a larger gathering of foreign members than any of them, and that it is calculated to promote the advancement of our art. Those in the United States who have worked to this end, in spite of much discouragement, well deserve the gratitude which was accorded to them by formal resolution. We have purposely abstained in our allusions to the Congress from pointedly referring to the domestic differences among our brethren in the States, which threatened to seriously mar the success of the Congress, if not to prevent it altogether. Those who persevered in spite of all opposition, and who have carried through the Congress so successfully, may well be satisfied. They have done a great service to their country and to their profession in all countries. It is not necessary for us to say that they committed no faults and made no mistakes. Such praise is not for mortals in a world so full of "spilt saltpetre" as ours. But they have carried through the Congress, and we thank them. There is yet one other service they can do: in any official action that now devolves upon them, to strive to obliterate the last relics of discord, and to hand on the light of truth and charity, undimmed and unqualified, to those in Berlin on whom will now rest the burden of responsibility for the next Congress. They can well afford to be magnanimous, and to help to make the representation of the States at Berlin so complete as to bear no traces of recent divisions.

The scientific value of the addresses and papers read at the recent Congress cannot be estimated till we have seen them in full. On the whole, judging from abstracts of the papers and discussions, we are inclined to say that they have been practical rather than theoretical, and have had reference to useful rather than transcendental aspects of medicine. Neither, so far, have we met with much indication of original matter in the papers. But this is no dispraise. It was meet that in the most practical nation in the world papers and discussions should take a practical turn, and deal with questions at their practical point. No branch of medicine can be said to have been neglected, from that which deals with the brain to that which deals with the risks of decayed teeth, including, by the way, several instructive cases of pyæmia. The statistics of vaccination were much advanced in a paper by Dr. JOSEF KÖRÖSI, Director of Communal Statistics of Buda-Pesth (to which we hope to make more special reference), and other questions of Public Medicine were made subjects of interesting discussion. Every branch of medicine was well represented—notably the ophthalmic, the gynæcological, and the dermatological; so that we venture to forecast that the volumes of the Transaction Reports will have considerable practical importance.

THE Metropolitan Asylums Board, after sacrificing a week of valuable time, last Saturday reversed the unfortunate vote at which they arrived seven days previously, and they have now decided to open the Winchmore-hill hospital for the reception of the ever-increasing number of scarlet fever patients. By turning such places as laundries and linen stores into wards, and by decreasing the amount of cubic and floor space to which each patient is properly entitled, they have so far been able to receive all the sick sent to them, and we can only express a hope that the preparations at Winchmore-hill may be so rapidly pressed on that no block may occur in the working of the system which London has endeavoured to mature for the isolation of the infectious sick. Scarlet fever is still steadily on the increase in the metropolis, and there is no reason for believing that it will materially diminish until we are well into November, or even until the close of the year. The delay which the mischievous vote of Saturday the 10th inst. has brought about can only do harm, and already we learn that owing to it the usual tenders in connexion with the work of furnishing will have to be dispensed with; and thus the very attempt at economy, which was regarded as a foremost consideration by some of the opponents of reason, will in all probability now result in a necessary extravagance.

But even if all succeeds in connexion with the present epidemic, it will be a long time before London forgets the exhibition of unfitness for their posts which a large number of the members of the Asylums Board have exhibited. One of the greatest evils attending the sanitary administration of the metropolis has been the subdivision of authority; but, in a few respects, London had flattered itself that needless division had been got rid of, and the Metropolitan Asylums Board was looked upon as a body on which the metropolis as a whole was represented. Now we learn that it is possible for a majority of that Board to ignore the needs of the community on the occasion of an emergency such as Londoners are passing through, and so air their ideas

of economy, as well as show their want of appreciation of the most elementary portions of the duties assigned to them. As we said last week, it is the Poor-law element that needs largely to be eliminated from a body which, whether those they isolate are in receipt of relief or not, has to perform some of the most important sanitary functions that could possibly be delegated to them. They have, it is true, in this instance cried *peccavi*, but the chairman having received a letter from the President of the Local Government Board which in official terms told him that the Asylums Board had failed in their duty, and expressed the opinion that that duty ought to be performed without further delay, makes a public statement to the effect that the central authority ought to have told them what their duty was at an earlier date. What this means it is difficult to say; but that it was a statement deliberately made is the more evident because it was also embodied in a written communication addressed to the President of the Local Government Board. The public will naturally ask what the Asylums Board is for, if, with a staff supplying their officers daily with evidence that their hospitals are filling to overflowing and that the demand for accommodation is still on the increase, they need to be told in advance by the central authority what their action should be under such circumstances. One reason alleged for the intervention of the Local Government Board is that it had medical advisers whose counsel was available at so important a juncture. This may be, but it is certain that the Asylums Board should have all the information as to their own institutions and work which the central authority are able to obtain, and it is evident that there is a complete misunderstanding between the two bodies as to which of them should be prepared to provide matured medical advice in respect of the general work of the isolation of infectious diseases in London. That such advice has all along been and is still lacking must be obvious to anyone who has followed the history of the Asylums Board in its dealings with small-pox. Now the Chairman tells us that his Board looks elsewhere than to its own resources in order to learn how to deal with an epidemic of scarlet fever, and his colleagues receive the statement with signs of approbation. The outlook is by no means promising.

THE Address on Fever delivered by Professor AUSTIN FLINT before the International Medical Congress comes opportunely at a time when attention is being more than ever attracted to this subject. There is, moreover, a wide contrast in the manner in which Dr. FLINT has dealt with the question and the line of argument adopted by Dr. MACALISTER in his recent Gulstonian Lectures. For, although basing his reasonings upon physiological grounds and facts upon which as a physiologist he has every title to be heard, there is hardly a single note throughout his address upon the aspect of pyrexia with which Dr. MACALISTER so fully and so ably dwelt. The reason for this silence upon the intricate subject of the relation of the nervous system to the production of normal and abnormal heat is perhaps not far to seek. Professor FLINT would be the last to ignore the importance of this aspect of the question, but he seems to have chosen to drive home certain practical lessons, rather than to venture upon the boundless field of theoretical speculation. In so deciding he has rendered no mean service, and has ensured to his address a wide attention on the part of the profession. He has nevertheless found it necessary for the continuity of his argument to make one assumption, which modern discovery goes far to justify. The essential fevers, he affirms to be due to a special cause—a micro-organism,—the operation of which ceases after the lapse of a certain time. This assumption has almost gone beyond the stage of a reasonable hypothesis; for not only have specific pathogenic microbes been detected in the blood and tissues of a great number of fever patients, but the known facts of contagion, of incubation, of the self-limited duration, and the immunity conferred by one attack against a second, which characterise so large a proportion of this class of diseases, are strictly in conformity with all that is as yet known of the properties and vital conditions of microbes. What, then, can be simpler than to assign the leading phenomena of the febrile state to the operation of the vital activities of these minute parasites? But when it is granted that these are the morbific agencies, we are still a long way from solving the next problem—namely, the mode in which they operate; and Professor FLINT did not venture to supply this link in the causation of the febrile process. Whether the poison they generate acts upon the heat-controlling centres in the nervous system, whether the presence of the microbes in the blood is more directly a cause of the tissue changes which are at the root of the increased production of heat, or whether they operate in some manner as yet unconsidered by the theorist, it is certain that we have not the knowledge requisite to supply this hiatus. Much has been done, notably by Dr. BURDON SANDERSON, and we have derived therefrom some facts as to the chemical changes which are in operation; but for all that, at the present time we must be content to accept the bare fact that fever, which is characterised by an excessive production of heat, is concomitantly marked by excessive tissue metabolism, with resulting inanition.

This practically was the position assumed by Prof. FLINT, and we owe much to him for so clearly bringing into relief the physiological phenomena which characterise the maintenance of animal heat and the pathological features of the febrile state. In doing so he introduced a novel, and at the same time a most important, point for consideration. From his own and other observations he clearly proved that in the normal process of nutrition, whereby the heat of the body is maintained, the formation of water is an essential factor. This is a point which has certainly been lost sight of. Attention has been concentrated upon the excretion of carbonic acid and urea as indicative of the oxidation of food and tissues; but the facts that the water daily excreted is in excess of that ingested, and that a large proportion of the hydrogen of the ingesta is by no means represented in the egesta, justify the conclusion of Professor FLINT that the oxidation of hydrogen is an important element in nutrition, and that, as regards the animal economy, water is to be placed in the same category as carbonic acid and urea. In muscular work, which is accompanied by increased heat and increased elimination of carbonic acid and urea, there is also increase in the discharge of water. But in fever the normal metabolism is

deranged. There is excessive oxidation of tissue, which the food supply is insufficient to counterbalance, and consequently there is an increased excretion of carbonic acid and urea. The fatty tissue is consumed; the muscular tissue and gland cells degenerate; but with all this evidence of increased oxidation there is a diminished formation and suppression of discharge of water. This last-named circumstance is held to account for a great part of the phenomena of fever. For although in health the oxidation of hydrogen takes its share in the production of animal heat, yet the water thus produced is available for the equalisation of temperature by cutaneous transpiration. In fever the suppression of this product of oxidation is wanting. The pyrexia, says Professor FLINT, "is fed, so to speak, by the fatty and solid tissues of the body alone." The disturbance in the economy due to the lack of water heightens the fever, owing to the consequent suppression of the cutaneous functions, and increases the disintegrative processes. For "in simple inanition the tissues of the body are economised by the excessive formation of water and the increased prominence of this process in calorification."

The application of these facts to the rational treatment of fever was made by Professor FLINT in a manner which proved the harmony subsisting between physiological inquiry and practical medicine. He showed that in the treatment of fever the abstraction of heat by external cold is one of the most rational of procedures; for in fever we have as a fixed condition an increase of the process of calorification. By the application of cold to the surface we abstract the excess of heat, and thereby reduce the temperature of the body. The proof of its efficacy lies in the notable subsidence of the nervous derangements which are secondarily due to the heightened temperature. The administration of antipyretic drugs has a similar effect, but the explanation of their action is obscure. It is possible that they operate by restraining metabolism, but, after all, our use of them is largely empirical. One of the chief lines of treatment of fever is that indicated by GRAVES—suitable and sufficient alimentation. Hampered as we are in this respect by the enfeebled digestive powers, Professor FLINT thinks we may do more than we are in the habit of doing in the way of administering fatty and farinaceous foods, the great object of alimentation being to retard and repair the waste and degeneration of tissue, and also indirectly to save the tissues by furnishing material for oxidation. On this ground he argued strongly for the retention of alcohol in the fever diet, maintaining that its ready oxidation rendered it a most suitable food, whilst it at the same time supplied the water of which the body is so much in need. In this connexion he alluded to the probable normal production of alcohol in the body from sugar; and he further illustrated the point by a reference to diabetes, where, in spite of increased consumption of nitrogenous and fatty substances, there is wasting and a diminished temperature, because the sugar is perverted from its normal office in the economy and is discharged unchanged. Professor FLINT admits, and no one can gainsay it, that the administration of alcohol in fever has been abused; but he has, none the less, done good service in once more recalling us to the sense of its value, when judiciously given as a hydrocarbon which can be utilised without any undue strain on the digestive or assimilative powers.

A LETTER from Mr. ED. W. WILMOT, which appears in a contemporary under the above heading, first expresses the opinion that true cholera does not exist in Malta, and then gives certain information having important bearings on the question of quarantine. We do not propose here to discuss the correct name of a choleraic disease which, according to published returns, killed 177 persons out of less than 300 recorded attacks up to the middle of this month, but we would point out that, if these returns even approach trustworthiness, there is not much to choose between "this choleraic diarrhœa" of Malta and the true Asiatic disease. But the writer's other statements deserve more than a passing notice. He refers to the grave distress and poverty which prevail, and points out how the disease is limited to the Maltese labouring classes as opposed to the troops. The former class are suffering severely, and poverty with its depressing influences, together with insufficient and bad feeding, are but too well known to act as predisposing causes to the spread of cholera; the latter class are well fed, properly housed and cared for, and so far they have immunity. But why has so great a contrast arisen between the two classes? The letter supplies the answer. The real distress is due to want of work, caused by empty harbours and deserted quays. And why has business so largely come to a standstill? Because the various nations have, with but few exceptions, put Malta in quarantine. Now Malta has always taken a very prominent position as regards quarantine measures, enforcing them with severity against other countries suspected of having cholera. Her attachment to those measures has not prevented her from being attacked with cholera; and now she is learning the lesson that, apart from their failures, those measures induce the very conditions which tend to the spread of the disease against which they are aimed. Her apologist also pleads for the removal of the barrier which others have seen fit to set up around her, and urges that there is no reason for it. The examples of Italy and of France are quoted, and it is stated that "no quarantine is imposed on passengers from Malta either at Marseilles, Naples, or on the Franco-Italian Railway frontier." But the truth is that Italy, and in some degree France, are progressive nations on this subject. They have had bitter experiences of the utter uselessness of quarantine restrictions; and Italy, having first abandoned land quarantine, has this year abandoned quarantine by sea; whereas France has given up her trust in quarantine by land, and would now not even impose sea quarantine against Malta. The lesson is, we trust, being learned, though slowly, that it is to the adoption of sanitary measures, and not to the imposition of quarantine restrictions, that Europe must trust for the prevention of cholera; and it is to be hoped that next time a rumour of cholera appears in the Mediterranean, Malta will imitate the example which is now being set to her at Marseilles and at Naples, and that, instead of issuing placards warning people away from her ports, she will so organise her sanitary arrangements that any imported infection can be properly dealt with without its finding on shore the conditions favourable to its development and spread.

Malta has all along been a great barrier in the eyes of Europe generally to the abandonment of useless and vexatious quarantine restrictions, for those who would induce other nations to follow the English lines of cholera prevention have often been reminded of the proceedings taken by this little English Mediterranean colony. We believe that, in so far as these antiquated measures are concerned, the colony is self-governing, and hence we must await the time when those responsible for her internal government shall have learned, by such experiences as her population is now going through, whether to trust as heretofore to the old-fashioned restrictions or to adopt true measures of sanitary prevention.

Annotations.

"Ne quid nimis."

LONG SITTINGS OF THE COMMONS.

IT is, we believe, understood that some endeavour will be made at the commencement of the next session of Parliament to procure such additions to the Standing Orders as shall be effectual for the prevention of that wanton and ruinous waste of time and strength which has in recent years taken the form of prolonged sittings, as a piece of tactics used by the Opposition in the House of Commons. The postponement of the adjournment is no doubt not only an obstructive, but a very destructive policy. The Closure is scarcely of a nature to admit of its extensive use. If this summary ending of a debate were adequately employed, it would be held to be abused, and speedily fall into discredit, with the result of its abandonment by successive Parliaments. What is wanted is probably a fixed limit to the sittings of the House, something like the rule that obtains on Wednesdays, but without the penalty of dropping Orders. It would be absurd to provide the Opposition with a power of talking out measures wholesale. To outsiders it would seem that one of two methods might be adopted—either to order that the House should stand adjourned every day at 1 or 2 o'clock A.M., or to make the Closure an automatic rule coming into force at a definite period of each debate, unless the Opposition could show the strength now required to enforce the closure. Perhaps this last suggested procedure would be the simplest, as it would cast on the party of delay the onus of showing a numerical strength sufficient to entitle it to prolong a discussion beyond reasonable limits. It has been suggested that the time to be occupied by speeches should be limited, but there are difficulties in the way of any such plan as this which it would be extremely difficult to overcome. From the health point of view—that from which we, of course, mainly regard the question,—it is imperative that effective measures should be devised. Very grave mischief is being done to members of all parties by the prodigal waste of strength caused by long sittings. Not only are Ministers, who must needs work at their offices or in departmental business nearly all day notwithstanding the fact that they are kept up at night, exhausted, but the strain is very great on all members of the House of Commons, and especially on the professional men and merchants who now constitute a considerable proportion of the Lower House of Parliament. The effects of these long sittings are beginning to show themselves in the impaired health of members generally, and the time cannot be far distant when a heavy mortality will begin to be apparent, the inevitable penalty of an abuse of physical as well as mental powers which nature will not tolerate. The atmosphere of the House is bad, and each session it is becoming worse. If the present system of reckless strain on the vital strength of our law-makers is not quickly reformed there will be a catastrophe, which too late must recall the House to reason.

TREATMENT OF CASES OF BITES BY RABID ANIMALS.

THE report, drawn up by Mr. V. Richards of Goalundo, and forwarded to the Inspector-General of Civil Hospitals, Bengal, concerning cases of animal bite treated by potassic permanganate at the various dispensaries in Bengal contains matter of an interesting nature, but of little practical value. We are glad that the tone in which the report is written does not partake of any bitterness against the Pasteurian method of treatment of animal or rather rabid bites, and we feel also that the conclusion at which both its author and the Inspector-General arrived, to the effect that the method of treatment should have a further trial, will commend itself to the heads of the Municipal Government of Bengal. M. Pasteur is said to have treated 48 individuals supposed to have been bitten by rabid wolves, and of this number about 14 per cent. are said to have died, and it is curious that the mortality percentage of cases in which the bite was inflicted by rabid jackals treated by the potassic permanganate method, as gathered from Mr. Richards' returns, was practically the same. There is nothing novel in the permanganate method of treating wounds inflicted by rabid animals; and seeing the object of the treatment is to destroy the virus *in situ*, it may well be doubted whether, after the lapse of some little time, it would be possible, in the case of the rabies poison, to completely destroy even the virus which remained about the wound; and although the poison is considered to remain at the site of introduction, it is questionable whether this view is strictly correct.

IRISH VITAL STATISTICS FOR 1886.

WITH commendable promptitude the Registrar-General for Ireland has just issued his twenty-third annual report, dealing with the vital statistics of Ireland for last year. The corresponding report for England and Wales will certainly not be in the hands of the public much before the close of the year; and it is scarcely three months since the Registrar-General for Scotland issued his annual report for 1884! Due credit is therefore due to the Registrar-General for Ireland for having found the means to issue his annual report within eight months of the close of the year to which it relates. We must confess, however, to some disappointment at the contents of the report proper, which occupies twenty-nine pages; of these, fifteen are devoted to meteorology, and but eleven to the discussion of the vital statistics of the year. The abnormal condition and age distribution of the Irish population invest the vital statistics of that country with exceptional interest, and it is disappointing to find that the report just issued affords no ready means for judging of the effects of these disturbing influences upon the vital statistics of the country. For instance, we are told that the birth-rate in Ireland in 1886 was equal to 23·3 per 1000 of the estimated population, and that it was 1·4 below the mean rate that prevailed in the ten preceding years. It should be remembered, however, that the birth-rate in England and Wales in 1886 was 32·4 per 1000, or 9·1 higher than the rate in Ireland; and it would not be without interest to have some light thrown upon this wide variation between the birth-rates of the two countries. It appears that the estimated population of Ireland in the middle of 1886 was 388,046 less than it was in the middle of 1876, and it is obvious that this decrease, caused chiefly by emigration, consisting mainly of young adults, must seriously affect the reproductive capacity of the Irish people. In order to correct for this elimination of young

adults from the Irish population, let us calculate the English and Irish birth-rate in 1886 upon the estimated number of women aged from fifteen to forty-five years in each country. Calculated in this way, the births registered in England in 1886 were equal to 141 per 1000 women of these ages, while the proportion in Ireland was 104 per 1000. Even these corrected figures must, however, still understate the true fecundity of the Irish population: (1) because it has been assumed that the *proportion* of women aged from fifteen to forty-five years in Ireland in 1886 was the same as in 1881, notwithstanding the continued large annual proportion of emigration; (2) because the proportion of married women at these ages is probably larger in England than in Ireland; (3) because the proportion of illegitimate births is much larger in England than in Ireland; and (4) because it is probable that in Ireland a far larger proportion of births still escape registration than is the case in England. These are some of the reasons which detract from the value of the mere birth-rate to population in Ireland for the purposes of comparison with the birth-rates in other parts of the United Kingdom, where the age distribution of the population is so different. Similar difficulties stand in the way of accepting the gross death-rate in Ireland as an entirely trustworthy measure, for comparative purposes, of the true mortality of the population of Ireland.

WORKING-CLASS BIRTH-RATES.

THE social and political importance of the birth-rate among the working classes, and its effect upon all population and vital statistics, invests with undoubted value all trustworthy information on the subject. The recently issued report of the medical officer of health upon the sanitary condition of St. Giles's in 1886 contains some information bearing, among other things, upon the varying birth-rate in different parts of this sanitary district, which has deservedly given rise to some comment. The district of St. Giles includes, besides the parish of St. Giles-in-the-fields, the parish of St. George, Bloomsbury, and is divided into three registration sub-districts—St. George, Bloomsbury, St. Giles South, and St. Giles North. The report in question states the birth-rate in these three sub-districts to be 21·9, 43·5, and 19·7 per 1000 respectively. These wide variations are thus explained by the medical officer. In Bloomsbury the low birth-rate is due to the large proportion of domestic servants included in the population housed in the squares and broad residential streets around the British Museum. In St. Giles North the low rate is, not so conclusively, attributed to loss of population through clearances for new streets—meaning, we presume, that the population of the sub-district is over-estimated. With regard to the high rate, 43·5, in St. Giles South, it is said to be due to the number of children born in the Peabody Buildings and the British Lying-in Hospital. As this part of the sub-district also shows an abnormally high death-rate, these facts have suggested the question whether it is a "necessary condition of human life that the weakest and worst members of the species should reproduce themselves most rapidly"? Now it is not a fact that what are known as "slums" have generally high birth-rates, although nearly all blocks of *improved* dwellings for the working classes show abnormally high birth-rates. If the birth figures for St. Giles South are looked at a little more closely they will be found to be misleading. If due correction (for which the report gives the necessary figures) be made for the births in the Peabody Buildings in Wild-street, and in the Lying-in Hospital, the birth-rate in the rest of St. Giles South is reduced from 43·5 to 31·7, which is 0·5 below the average for the whole of London. It is stated in this report that the birth-rate in the two blocks of Peabody Buildings situated in Great Wild-street and in Little Coram-street was 43·8 and 53·6 per 1000 respectively in 1886, and the last annual report issued by the trustees of the Peabody Donation Fund shows that the birth-rate among the rather more than twenty thousand persons housed in these improved dwellings last year averaged 42·4 per 1000, or more than 10 per 1000 above the general London rate. It should, however, be borne in mind that these, as well as most other, blocks of improved industrial dwellings are almost exclusively inhabited by married couples, in the prime of life, belonging to the better paid of the artisan class, among whom the birth-rate is bound to be high. Most of the unmarried young women of this class are in domestic service, large numbers of the single men live in common lodging-houses, and most of those past work or out of work are either packed away in the "slums" or are in workhouses. It is therefore most misleading to accept the birth-rates in improved dwellings as the birth-rates of the working classes. The working classes, compared with the upper and professional classes, undoubtedly marry young, and therefore would probably yield a higher birth-rate; but there is reason to doubt whether the birth-rate of the whole weekly-wage-earning class is much higher than that of the shop-keeping and lower middle class. It is much to be regretted, however, that no thoroughly satisfactory statistics on this subject exist, as it is one on which doubtful conclusions are frequently drawn from very insufficient data.

MEDICAL CERTIFICATES.

THE giving of a medical certificate, though one of the simplest of the duties that fall to the lot of the medical practitioner, is also often one of the most thankless. An illustration of this has just been brought to our notice. Mr. J. G. Fitch, who is one of Her Majesty's chief inspectors of education specially detailed to the examination of training colleges for female teachers, declares: "It is the complaint of the medical officers of the colleges that this testimony is often very untrustworthy [i.e., testimony to the health of candidates for admission to the training colleges] and that they are compelled to protect themselves by much further examination, even when the certificates given by local medical practitioners have been of the most positive and unqualified kind." We have no means whatever of knowing what foundation of fact there is for this complaint. However that may be, the accusation is not of such a kind as ought to be made in general terms. But it is more than likely that, having once been made, this remark will be repeated from time to time. It is well, therefore, that the attention of our readers all over the country should be drawn to it, and that some hint should be afforded to them of the construction the Training College authorities incline to put upon a candidate's certificate of health. Upon this point Mr. Fitch writes: "Since by the conditions of arts. 130-132 the grants paid to training colleges are in a large measure determined by the number of young persons who successfully complete their two years' training, and who afterwards serve for a satisfactory period of probation and obtain their certificate, it becomes the interest of the authorities of those institutions to receive only those students who are likely to complete their course with credit. The most careful inquiries are made, therefore, respecting their character, previous career, and social surroundings; and, considering that the young people are about to enter a laborious profession, special testimony is required respecting their health." We think that a guess may be hazarded here as to the real cause of the misunderstanding which the Chief Inspector reveals. It is easy to understand that the practitioner to whom a girl applies for a certificate of health preparatory to admission to a training college has questions of infection and freedom from incapacitating

maladies in his eye rather than the pecuniary interests of the colleges, and that nothing on such an occasion is further from his thoughts than to examine as if he were passing a lad into the army or a candidate for an assurance company. And we are bound to add that it is his duty to hold an even balance between the colleges and the candidates, and carefully to shut out from his view considerations of the sort upon which the training colleges would seem to insist. It would be monstrous if a capable woman, or man either, could be debarred from choosing the profession of a teacher merely because somebody else promises to earn a training school a larger grant.

SCLEROSIS OF THE HEART.

ACCORDING to Huchard the causes of sclerosis of the arteries of the heart may be divided into three groups: the first being due to intoxications, or rather toxæmia, by alcohol, tobacco, malaria, and lead; the second group is formed of causes such as the diathetic states of arthritism, gout, and syphilis; whilst the last group, and one to which exception may with at least some reason be taken, is composed of causes such as physical, moral, and intellectual over-pressure. The sclerosed heart may be either hypertrophied or dilated, but most often dilatation and hypertrophy are associated. Modifications of the form and size of the heart are the direct consequences of the initial vascular lesion, and not of the ensuing sclerosis. The common lesion is obliterating arteritis of the small coronary vessels, and it takes place slowly, so as to allow of time for compensating hypertrophy and for sclerotic lesions to develop. If the arteritis is of more rapid progress, dilatation of the heart and alterations of the heart-muscle fibres are the preponderant changes. Three histological varieties of cardiac sclerosis may be differentiated, following Weber: (1) perivascular sclerosis due to the propagation of inflammation; (2) the dystrophic sclerosis from regional ischæmia; and (3) mixed sclerosis. The changes in the muscle fibres are but imperfectly known. Two of the principal alterations are simple atrophy and the vitreous degeneration of Zenker. Nosographically, cardiac sclerosis is one of the anatomical expressions of arterio-sclerosis of the heart. Weber regards arterio-sclerosis as the outcome of certain etiological conditions, amongst which must be ranged heredity, certain hygienic habits, and various chronic intoxications.

MEDICAL EXAMINATION OF MISSIONARIES.

AT no time is the need of due medical examination and sanitary supervision more urgently needed than when troops, especially young troops, are being sent abroad to some tropical climate where ague, dysentery, and other serious diseases are endemic. Missionary societies, which are constantly sending out young men and women, who have frequently passed a large part of their lives in study or in sedentary occupation, to more or less unhealthy climates, are not, as a rule, as careful as they should be with regard to weeding out unsuitable constitutions by strict and careful medical examination, nor do they generally supply the young missionary with medical or sanitary regulations to guide him in his work. He is, it is true, usually sent to an older missionary, from whom he receives many valuable hints; and if there should happen to be, as is only too rarely the case, a brother medical missionary in the station, he ought to be at no loss for guidance. Nevertheless, it not unfrequently happens that a young missionary is left alone in an isolated and unhealthy place, and if his zeal (which is usually considerable) is not tempered by discretion the consequences to his health may be serious. A young missionary has lately succumbed to an attack of fever (due at first to a wetting) on the west coast of Africa, and a good deal of discussion has been taking place in the organs of the religious denomination with which he was connected with regard to the question of whether anyone was to blame. It is thought by some that his general condition was such as ought to have precluded his being allowed to go to such a climate. Whether he was or was not medically examined before being sent out, his death may well serve as a caution to those who have the duty—honorary, it may be, but perhaps all the more responsible on that account—of deciding as to the fitness of missionary candidates for tropical climates, to weigh the circumstances very carefully, and to keep their minds entirely free from the bias natural to those who take an interest in missions, but which ought not to be allowed for a moment to interfere with the opinion dictated by purely scientific considerations. The truer and more scientific the opinion given, the less will the missionary work suffer.

THE EXETER CATASTROPHE.

THE jury empanelled to inquire into the circumstances connected with the disastrous fire at the Exeter Theatre, by which over 130 persons lost their lives on the 5th inst., have returned a verdict of "Accidental death." In riders appended to their verdict they expressed opinions to the following effect:—(1) That the magistrates are much to blame, and deserve censure for not having completed their inspection of the theatre, and for suffering themselves to be misled by the architect in the matter of the exit from the gallery to the second circle. (2) That it is a matter for regret that the Town Council's bye-laws do not allow of their efficient control over public buildings. (3) That it is deplorable that the architect, having been engaged as a specialist, should have produced such a building with so many structural defects. (4) That the architect failed in his duty in not providing a second exit for the gallery. (5) That legislation bearing upon the inspection and remodelling of means of exit, and the stage-working arrangements of all theatres, and the prevention of fires therein, should receive the earliest attention of Parliament. (6) That some effectual plan of excluding fire and smoke from the stage and other portions of the building should be adopted by the fixing of a water screen or other apparatus. (7) That the chief constable should be empowered to make inspection at all times of all parts of the building, without notice to the directors or to managers, and that he should make such inspection at least once every month when the theatre is open, and thereupon transmit a report of his inspection to the Town Council, and state whether all fire hydrants, ventilating apparatus, &c., are in perfect working order. (8) That before a magistrate's licence is granted for any public building, such building shall be thrown open, with all its approaches, entrances, and exits, to the inspection, under police supervision, of all householders in the borough for a week after its final completion.

LEICESTER AND VACCINATION.

Mr. J. T. BIGGS, in a letter to a contemporary, makes merry over the 100,000 persons in Leicester who are unprotected by vaccination from small-pox in defiance alike of the law and of common sense. What is especially gratifying to Mr. Biggs is that the contagion of this prejudice has spread to the more educated, or at least the wealthier, classes in Leicester. So that, whereas in ten years public vaccinations in comparison with births have decreased to the extent of 75 per cent., the decrease in private vaccinations is as much as 97 per cent. We are not inclined at this moment to disturb the peace and self-complacency of those persons who have allowed themselves and their children to get into such a state of exposure. We only wish at present to point out the inaccuracy of Mr. Biggs, whose statement will entirely mislead the public,

especially in one sentence, where he avers that in the last nine years there have been twenty-four importations of small-pox, the whole of which have been absolutely stamped out *by sanitary measures alone*. Mr. Biggs here implies that isolation, cleanliness, and disinfection have given the people of Leicester their immunity from the disease. We know this to be incorrect, and Mr. Biggs ought to know it too. Leicester is saved from the spread of small-pox when it occurs *by vaccination* just as all other towns are saved, and but for this much-abused operation the population of Leicester would soon be in a state of panic. When an importation of small-pox occurs in Leicester, the case or cases are visited by the sanitary authorities, the sanitary inspector, and medical officer of health, who to a man are vaccinated or revaccinated. The case is then forcibly removed to a small-pox hospital, all nurses and officials of which are revaccinated, unless they happen to have taken the clumsy Leicester method of protection by taking the small-pox. Not only so. Leicester authorities proceed to revaccinate every individual in the house in which the hideous disease has occurred, or who has in any way been exposed to the case. It is this cordon of vaccinated and revaccinated persons that saves Leicester. Without this all the boasted sanitary police arrangements would be mocked. If Mr. Biggs doubts this, let him ask the medical officers of the corporation of Leicester. If he thinks this cordon a delusion, let him get an unvaccinated staff of officials to receive the next importation of the disease he so underrates. If he agrees with us that Leicester's unvaccinated thousands are saved by the vaccinated few, he is ungrateful in not stating the fact.

THE DIGESTIVE FERMENTS.

IN an interesting communication to the *Pharmaceutical Journal* of August 20th, Mr. Schweitzer of Kansas City, U.S.A., states his adherence to the following conclusions: Pancreatine or pepsine (or the pig's stomach and pancreas) acts with perfect ease and freedom in presence of each other. When digested together they do not destroy each other, nor do they lessen each other's digestive activity in whatever proportion they may be digested. Long-continued exposure to heat and moisture injures their original activity. Digested in alkaline or acid solutions the injury is increased. Pancreatine when digested for some hours in an acid solution becomes permanently injured or destroyed, and pepsine when digested in an alkaline solution for some hours is also permanently destroyed. But a state of acidity (*sic*), such as the healthy natural secretion of the salivary glands, of the stomach, or of the pancreas presents, is not sufficient to interfere with any of their digestive functions.

TREE PLANTING AND DRAINAGE.

IT is not merely an æsthetic fancy, but equally a prudent regard for the health of the community, which has led civic authorities to plant with bordering trees many of the greater thoroughfares in towns and cities. By this arrangement the advantages of a purer air and of shade in warm weather are gained for the townsman, besides the implied increase of space and the amenity conferred by thus practically transporting a strip of country into town. It is one of the happiest features in the development of cities now so rapid, that in their outer and growing zone the hard lines of road, wall, and railing are interrupted at frequent intervals by spaces of green sward and by the luxuriant foliage of climbing shrub and spreading tree. In so far we have learnt the lesson of experience, and, in thus preserving round our homes a healthy atmosphere and some degree of rustic beauty, are wiser for ourselves than the town dwellers of a former generation. Still, we are not always duly careful even in our wisdom, as the sequel shows. This very custom of tree planting in streets is open to a danger fortunately not common, but still grave enough to counteract, where it exists, the best effects of rural surroundings. It has happened repeatedly, as we are reminded by the letter of a recent writer on this subject, that the roots of trees in their growth have sought out the crevices of drain pipes adjacent, and penetrating these, have grown with such vigour on the nourishment which they found there as completely to choke the pipes and prevent the exit of sewage. We have here, of course, no argument against the continuance of the boulevard system, but certainly a caution, enjoining first the more perfect adaptation of drain segments, and secondly a kind of care not always observed in the relative arrangement of wayside shrubs and trees.

CHOLERA INTELLIGENCE.

LAST week we referred to the considerable extension of cholera at Messina, in Sicily. Since then there have been in the seven days ending the 19th instant no less than 665 fresh attacks and 265 deaths in the province generally, the greater part being apparently in the city itself. If the truth were known, it would doubtless transpire that the disease was prevalent in Messina before the date at which it was suddenly announced that the city was so gravely invaded; as it is, the epidemic is steadily maintained in the province, and on two occasions during the week under consideration the mortality has either reached or exceeded 50 a day. In Palermo a daily mortality varying from 3 to 10 is still continuing. No regular returns are received from other parts of Sicily, but the disease still prevails in different parts of the island, and whilst Messina is attacked to the extreme east, Trapani also suffers at its western extremity. On the mainland, the principal seat of the disease is in and about Naples, the deaths in the province of that name amounting to some 10 to 20 a day. Pozzuoli, Castellamare, and other places in the Gulf of Naples are especially mentioned as being still attacked. To the extreme south, Reggio, in Calabria, remains a seat of the epidemic; and it is rumoured that cases occur daily in Rome. There is, however, difficulty in ascertaining how far the attacks in the capital are cholera proper, or cases of severe diarrhœa, such as are met with in many large centres of population at this time of the year. In Malta, whilst cholera remains fatally prevalent, the disease shows no further signs of extension, and it seems still limited to the more destitute amongst the natives of the island.

MEDICAL EDUCATION FOR THE CHINESE.

DR. WYKEHAM MYERS is to be congratulated on the success that has attended his labours in educating Chinese youths in medicine. The movement is as yet quite in its infancy, but it has attracted a good deal of attention amongst both Europeans and natives in China, as it is hoped that from a very small beginning a great scheme of medical education for China will ultimately spring up. It has been found impossible as yet to give a really satisfactory medical education through the medium of the Chinese language, and so only students who have had a good Western education are accepted. Dr. Myers teaches in English. For the first of the two professional examinations, anatomy, elementary surgery, physiology, and chemistry are required. Great difficulty is experienced in teaching anatomy owing to the prejudices of the Chinese regarding dissection. It appears, however, that by means of models and plates the students have really contrived to learn their anatomy in a satisfactory way. Two examining boards have been established, in Hong-Kong and Shanghai respectively. Two students passed the primary examination in Hong-Kong last year, and one has

just passed in Shanghai. This young gentleman, Mr. Goh Kit Mob, was presented with his certificate at an important public meeting in Shanghai. Next year the two others who passed their primary in Hong-Kong last year will come up for their final examination in Shanghai, it being a rule that each student must pass his two examinations before different boards.

MARIANO SEMMOLA.

THE Italian papers are congratulating the distinguished Neapolitan physician on the *bella figura* he made at the Ninth International Medical Congress, all the more that his "record," as they point out, was already a brilliant one, on which it was difficult to improve. In 1883 his monograph on Bright's Disease, read before the French Academy of Medicine, evoked from that body a signal mark of approval and admiration. At the Congresses of Brussels, Amsterdam, London, and Rome, to say nothing of many other academic meetings in Italy and abroad, he never failed to contribute able and original matter to the proceedings. At the Sanitary Congress held in 1884 at Vienna he represented the Italian Government—represented it, moreover, so successfully that Max von Pettenkofer referred to him, in military phrase, as "my brilliant companion in arms." From Berlin he received gratifying attestations of the ability with which he spoke for the Italian view of debated points in medical theory and practice. His compatriots, not less proud of him as a benevolent citizen than as a learned and skilled physician, dwell on his indefatigable and fearless self-abnegation in the terrible explosion of cholera at Naples in 1884. Among his most cherished possessions is a portrait, in oil, of Louis Kossuth, "the Hungarian Garibaldi," as the Italians call him, a gift enhanced in worth for him by the following inscription, which stands engraven below it:—

Illustre Dottore Semmola,
Senatore del Regno,
che, profondo scrutatore
delle leggi del organismo umano,
coll' arte sublime
all' ottuagenario ridonò forze e salute
ricordo e pegno di riconoscenza
da
Luigi Kossuth.

(To the illustrious Dr. Semmola, Senator of the Kingdom, a profound investigator of the laws of the human organism, who, in the exercise of his noble profession, re-endowed the octogenarian with health and vigour, this picture is presented, as a memorial and pledge of gratitude, by Louis Kossuth.)

SEWAGE SLUDGE AS MANURE.

IT is satisfactory to hear of any successful agricultural experiments with sewage sludge. Our contemporary, the *Metropolitan*, reports that Mr. Joseph Jessop, of Pembury, near Tunbridge Wells, has obtained good results with pressed sewage sludge from Crossness. Mr. Jessop selected a poor sandy soil upon rock, and treated portions of it with sewage cake, farmyard manure, and artificial manures respectively. We are not told what quantity of each was used, or the relative weights of the crops obtained, which is unfortunate, for evidence upon these points would have been valuable. But good crops were obtained with the sludge, and Mr. Jessop is evidently satisfied, as he has already ordered 200 tons more of the material. The Metropolitan Board of Works are prepared to supply the pressed sludge gratuitously to all farmers who wish for it, and are willing to pay the carriage. We sincerely hope the experiment will succeed, for it is lamentable that so large a quantity of food-supply element should be wasted. It must, however, be remembered that repeated attempts of the same kind have been made ere this, and that the results have not on the whole been satisfactory. Pressed sewage sludge is by no means destitute of manurial value, but it is a weak manure, and cannot, as a rule, stand much cost of carriage. If used as a substitute for other fertilisers, it must be used in considerable quantity, and it is not suitable for all soils. The Metropolitan Board of Works, by their obstinate adherence to the present sewage outfalls on the Thames, have reduced themselves to the necessity of adopting the very worst system for the disposal of their sludge, and are actually arranging to take it in steamers down to the sea. If they can succeed in giving away any considerable portion something will be gained, although even then their sewage system will remain a disgrace to the metropolis. Fortunately the disgrace is so palpable that it cannot much longer be tolerated.

PLAY OF FEATURES AND MOVEMENTS OF LIMBS IN SICK CHILDREN.

ONE of the errors of too much specialisation is the tendency that exists in the specialist to believe that his own department more than any other is a fertile field for pathognomonic symptoms and signs of great diagnostic value. It is true that in some respects the diagnosis of disease in children is a more difficult matter than diagnosis in adults, but the difference is not nearly so great as some specialists would have us believe. The play of the features and the movements of the limbs are of considerable diagnostic significance in children and infants, but these signs cannot be said to be of no value in the adult, and it may be questioned whether their significance is very different in the two classes of patients. Soltmann has written anew, in the *Jahrbuch für Kinderheilkunde*, Bd. XXVI., p. 2, on the characteristic movements of infants suffering from various diseases, and his conclusions are very much the same as those usually recognised; at the same time it must be remembered that none of the positions given for various diseases are invariable. We demur to the general statement that in simple and tubercular meningitis there is a fixed expression as of deep thought which is quite characteristic; and we do so partly because such fixed expressions are frequently absent, though sometimes obvious enough, and partly from the difficulty which must have occurred to everyone to recognise "fixed expressions as of deep thought," though we admit that an immobility of the features is frequently present. Such statements as the following (in writing of meningitis) are, in our opinion, not warranted in the present state of knowledge: "When the optic chiasm is pressed upon, the eyes are rotated upward, the head is thrown backward, and the countenance expresses astonishment."

OVERCROWDING IN RAILWAY CARRIAGES.

So much is done in these days to secure the comfort of travellers by railway that one is hardly prepared to find that the primary necessity of sufficient accommodation still remains to a large extent a vain desire. No doubt there is something to be said for the embarrassment of companies like those in the metropolitan district when they find themselves on some periodic holiday overwhelmed by the uncertain rush of a multitude of sight-seers. The most perfect arrangements are not beyond the possibility of confusion. We are certain, however, that more might be done than is done to arrest that headlong assault on railway trains, without distinction of carriage or number of occupants, of which everyone has had some experience at times of general rejoicing. A more substantial reserve of third-class carriages available for holiday requirements is one chief desideratum. Another is a more frequent service, and in this direction the companies have certainly done something. Lastly, we would propose that, in order to infuse a little more energy into the direction of affairs on the

platform, the force of porters be augmented for the time being, either with additional help of the same kind or with that of specially enlisted non-official helpers. The forcible intrusion of persons often in the dirtiest condition among the occupants of first and second class carriages, who have purchased the comparative comfort in which they choose to travel, is a matter of serious public inconvenience. The company of these intruders is not only objectionable on æsthetic grounds, but it is equally undesirable on sanitary principles. Overcrowding is thoroughly unwholesome in itself. It is doubly so in the circumstances we have pictured, since the possible transference of infection and another *contagium vivum* of parasitic nature is no mere shadow of imagination when one's companions have come from the slums of a great city. In their own interest, and with the best intentions, we commend this subject to the notice and earnest consideration of railway directors everywhere.

MR. CHADWICK ON SCARLET FEVER PREVENTION.

THE veteran sanitarian, Mr. Edwin Chadwick, C.B., will have done good by his recent letter to the Association of Sanitary Inspectors if his accounts of the efficacy of cleanliness of person and surroundings lead to more regard to these important matters. But it is a pity that diseases having little or nothing in common, special and general rates of disease and of death, and such matters, are all mixed up together, and that the absence of scarlatina, whooping-cough, &c., should be attributed to a multitude of causes, as clean air, the removal of putrid sewage, clean bed linen, warmth, manual exercise, &c. A reader who knows how varying are the predisposing and exciting causes of the different contagia gets a little confused before he reaches the end of the letter; but all will hope that some good in the direction of increased cleanliness everywhere and under all circumstances may ensue as the result of the publication of the document.

THE ISOLATION OF INFECTIOUS PAUPERS.

AT Warrington the question whether the Town Council ought to receive paupers into their infectious hospital has been raised from time to time, and the guardians consider themselves aggrieved by the refusal of the Corporation to undertake this duty. Legally, we believe the Corporation can do precisely as they choose in the matter; but, on the other hand, there is no duty imposed on the guardians of the poor to act as an isolation authority and to deal with a pauper infectious case in such a way as to protect the public health; indeed, instances have occurred in which guardians have distinctly told sanitary authorities that, whilst they are prepared to do their duty in providing infectious cases with proper care and nursing, they decline altogether to remove them from their homes and to isolate them in the interests of the public. The Public Health Act defines the sanitary authority as the proper body to provide means of isolation for cases of dangerous infectious disorders, and it draws no distinction in this respect between paupers and non-paupers. Some day we expect every sanitary authority will be so desirous to prevent the spread of infection in their respective districts that they will not trouble to inquire, in a case of small-pox or fever, what is the social standing of the sick person. But at present this view is not very generally taken, and whilst some sanitary authorities look to the guardians to repay the cost of such pauper infectious cases in their sanitary districts as call for removal to hospital, others altogether decline to receive paupers. Even this latter course can be justified under existing arrangements, for many sanitary authorities have not sufficient accommodation to classify their patients according to their social status as well as according to disease. And no one will doubt that in many instances excellent work done by sanitary authorities would be materially hindered and checked unless such classification could be made in the case of paupers.

DEATH OF RICHARD QUAIN, F.R.C.S. ENG., F.R.S.

WE have to announce the death of Richard Quain, F.R.C.S., F.R.S., Surgeon Extraordinary to the Queen, which took place at his residence, 32, Cavendish-square, on Thursday, Sept. 15th. He was buried on Wednesday last at the Marylebone Cemetery, Finchley. The funeral service was conducted by his old friend, the Rev. J. D. Stewart, M.A. Amongst the mourners were General Mairis, the Hon. G. and L. Brodrick, Rev. P. Smith, Mr. Le Gros Clark, F.R.C.S., Dr. Rayner, General Cockburn, Messrs. Needham, Dickinson, Lawrence, and Walker. Next week we propose to give some account of the late Mr. Quain's professional work.

AN EXPERIMENT IN EARLY RISING.

AN interesting experiment is on foot in Lincolnshire, where, in the Wesleyan Day School at Hatcliffe, a summer time-table has been arranged, upon the plan of commencing school at 8 o'clock in the morning, and finally dismissing the children at 1.30. The result, so far, is reported as follows:—

"This school is situated in a purely agricultural district, and up to the beginning of 1885 the attendance during the summer months was very unsatisfactory. The work of the Third, Fourth, Fifth, and Sixth Standards was almost suspended from the 1st of May to the end of September, owing to absent children. It was almost impossible to reach a high standard of attainments. By the suggestion of Her Majesty's inspector, a summer time-table was tried in 1885. The school commenced at 8 o'clock, and finally was dismissed at 1.30, the meetings being 8 to 10.30 and 11.15 to 1.30. The average attendance increased from fifty-seven to sixty-three. The scheme has been tried again this year, and the average has risen to seventy, with the same number (eighty) on the books. Owing to the increased attendance, work has been continuous, and the pressure of the winter months has been relieved. Teachers and scholars worked much better in the cool early hours of the day. The health of the children greatly improved, and the result of the year's continuous work is the excellent merit grant."

The plan certainly deserves to succeed, and if its success should be sufficiently pronounced to stimulate imitation, so much the better. Late hours are to such an extent a necessity of adult life and urban conditions that we cannot hope to see any great change for the better in this respect in society at large; but it is important on the score of health and vigour, both of body and mind, that our children should become habituated to work in the early hours of the day.

ETHER INHALATION IN TETANUS NEONATORUM

DR. DEGHILAGE, of Mons in Belgium, having a case of trismus neonatorum, and having repeatedly given chloral and ether per rectum without producing any effect, the child rapidly becoming worse and seeming in imminent danger of death by asphyxia, determined to administer ether by inhalation. In addition to this, artificial respiration was employed from time to time by means of a tube inserted into the nostrils. Some pieces of Rigollot's mustard leaves were also applied to the chest. The child was laid on its side, according to a suggestion made by Marion Sims. The result of this treatment was that in a few hours the little patient's condition had improved to a very marked degree. The next day profuse perspiration occurred and the spasms entirely ceased. Shortly after this the child was convalescent.

A LEAP FROM THE CLIFTON BRIDGE.

AN inquest was held on Aug. 8th before Mr. Harwood, touching the death of a man aged thirty, who was killed by leaping from the Clifton Suspension Bridge. The case is interesting in that a post-mortem examination was made and the injuries carefully described. According to the evidence of Mr. G. E. Lloyd, the death occurred from shock. There was extensive bruising over the right side of the chest and over the left clavicle. The fourth, fifth, sixth, and seventh ribs on the left side were broken; and also the fourth rib on the right side. Both lungs were lacerated. All the cavities of the heart were empty. The liver and spleen were ruptured. The fracture of the ribs was due no doubt to the impact of the body against the water, for an eye-witness deposed that deceased when about sixty feet from the water turned over and fell upon his back, and the depth of the river is such that it seems improbable the body, falling flat, would reach the bottom. We commend the action of the coroner in directing an official inquiry, as it is said, "in the interests of the medical profession."

BERI-BERI AND BACTERIA.

A DUTCH observer whose remarks on beri-beri were noticed in a recent issue of THE LANCET, Dr. Pekelharing of Batavia, now announces that he has succeeded in cultivating the micrococcus of beri-beri. From his cultures he infected seven rabbits and four dogs, of which six rabbits and two dogs died in a longer or shorter period with symptoms of paralysis of various groups of muscles, especially of those of the posterior extremities and of respiration. On examination extensive nerve degeneration was found. In some cases the animals were infected by the injection of cultures obtained from the blood of beri-beri patients, and in others by a mixture of the bacteria existing in the air of a barrack where the disease had occurred.

DEATH, IN HARNESS, OF A CENTENARIAN PHYSICIAN.

DR. NEKLEWITSCH, of Loske in Poland, has lately died at the age of 109 years, having a quarter of an hour before his death seen and prescribed for a patient. Sixteen years ago he had a paralytic stroke, affecting both his feet, so that he has since that time been obliged to confine his professional advice to the consulting-room.

A COMPENSATION CASE.

UNDER the above heading we drew attention in our issue of the 10th inst. to the refusal of the St. Thomas rural sanitary authority to grant compensation under Section 121 of the Public Health Act for bedding and clothing destroyed in a case of alleged cholera at Newton-Poppleford. The Local Government Board, having been communicated with, have advised that the authority are not, under the circumstances reported, enabled to apply their funds in recouping the friends of the deceased. This is doubtless a correct legal view of the case, for the section requires that the local authority should "direct" the destruction of such articles as may be compensated for; and in this case neither they nor, so far as we can learn, either of their officers had to do with the destruction in question. Another time it would be advisable that the proper officers of the sanitary authority should be at once communicated with, and if a medical opinion is handed in to any such officer to the effect that the destruction of clothing or bedding is needed in the interests of the public health, it is highly probable that action would at once follow. Anyhow, all responsibility would then lie with the authority of the district in which the occurrence took place.

GOVERNMENT INQUIRY INTO THE SANITARY CONDITION OF BETHNAL GREEN.

WE understand that the Home Secretary has appointed Mr. D. Cubitt Nichols and Mr. Shirley F. Murphy to hold an inquiry into the sanitary condition of Bethnal Green, and that the proceedings are to commence at the Vestry Hall on Wednesday, October 12th, 1887, at 11 o'clock. The inquiry is the result of an appeal from the Mansion House Council on the Dwellings of the People.

ST. MARY'S HOSPITAL.

THE arrangements for the accommodation of students of the St. Mary's Hospital Residential College, at 33 and 35, Westbourne-terrace, have been extended. A large room is furnished as a general library, and additional studies are provided on each floor. Special tutorial classes will, we learn, be organised at the commencement of the winter session, by the warders, Dr. Walter Pearce and Mr. A. Pearson Luff.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign medical and scientific men are announced:—Dr. Elias José Pedioса, Professor of Anatomy and Physiology in Bahia; Dr. Chastinet, editor of the *Gazeta Medica da Bahia;* and Dr. Don Juan Alvarado Gomez, director of the Ophthalmic Institute of Salamanca and editor of the *Correo Medico Castellano.*

TYPHOID FEVER AT DOWLAIS.

THE typhus epidemic at Dowlais is causing considerable anxiety to the sanitary authorities. There appears to have been a hitch in the nursing arrangements in the Fever Hospital—one of the nurses having contracted the disease soon after commencing her duties, and another having been overcome by panic and run away. Assistance had ultimately to be obtained from London. Later intelligence is to the effect that two of the nurses have succumbed to the disease, and that a report of the outbreak is being prepared at the request of the Local Government Board.

SOME of the members of Council of Hong-Kong are working hard at a Public Health Bill, which they hope to persuade the Government to adopt. The Chinese, fortunately, seem alive to the importance of the subject, and are actively assisting in working out the details of the Bill.

A VIENNA medical journal states that the vacation courses which have this year for the first time been organised have not been so great a success as could have been wished, a few of the classes only having been well attended, and these chiefly by foreign medical men.

WE are asked to state that Sir William Mac Cormac, in consequence of domestic bereavement, will be unable to take the chair at the Old Students' Dinner at St. Thomas's Hospital on October 1st, as announced in our advertising columns.

COURT SURGEON DITTMER, of Berlin, has just celebrated the fiftieth anniversary of his admission to the profession, which he obtained by the now obsolete diploma of *wundarzt* surgeon. The last of these diplomas was conferred in 1848.

DR. NEUSSER, who went to Bulgaria as body physician to Prince Ferdinand, has returned to his old appointment in Vienna—that of assistant in Prof. v. Bamberger's clinic.

THE Harveian Oration will be delivered by Dr. Stone at the Royal College of Physicians on Tuesday, October 18th, at 4 P.M.

THE SOCIAL ASPECTS OF THE INTERNATIONAL MEDICAL CONGRESS.

NOTWITHSTANDING that the City of Washington is, like most other cities, liable to suffer an annual desertion by the most influential part of its population during the early autumn, the ninth meeting of the International Medical Congress has been one of the most successful of its kind. We shall not err in saying that as a social undertaking merely, without regard to its professional aspect, this transatlantic gathering holds a place not second in importance to anything of a similar character that has happened, or is likely soon to happen, on that or this side of the dividing ocean. As an assemblage of medical practitioners and teachers in medicine met together with a common purpose of comparing and correcting the results of observation and invention, of devising new plans for future investigation, and of applying new modes of treatment in the art of healing, its significance is equally remarkable. With the single exception of London, no European capital has attracted so many representatives of medicine and surgery since the international movement first originated. Successful in point of numbers, the conference has not been less successful in possessing in more than one particular a thoroughly representative quality. It has been in the widest sense international. Almost every civilised people, besides races which might by courtesy be included in the same category, have contributed towards its membership. The four continents have given of the skill which is available for the treatment of disease in their civil practice, the military and naval services have subscribed each its quota of men and of material for discussion. Again, as regards the subject matter, it is almost superfluous to point out the illustrative diversities of study by which the sum of medicine can be viewed as through so many windows, and to state that each of these has received its full share of recognition in the working programme of the Congress. Last, but not least, the whole business and pleasure of this meeting have been administered throughout with a cordial good fellowship truly representative of that spirit of hospitality which happily characterises the American people and annually admits to the privileges of free citizenship strangers out of every country without distinction. President Cleveland and his assessors in the work of Government have been foremost in showing attention to the American practitioners and their guests. Not only have they taken an active part in the extra professional work of the Congress, but it is through their influence that Government buildings have been on several occasions available for social gatherings of the members. We are happy to recall the fact that in so doing they have but revived the precedents afforded by the conduct of other States, but we appreciate no less on that account the warmth of their generous consideration. Nor must we forget to offer an equal tribute of esteem to the American medical press, and to those citizens of Washington who distinguished themselves by affording a similarly handsome hospitality.

There are certain definite advantages connected with such conferences as that which is just over, and these may well occupy our attention during the remainder of the space at our disposal. Some, perhaps, may question their utility on the ground that an exchange of views is, in matters of mere knowledge, as easily possible by ordinary channels of publication. This argument we need not now stop to discuss. The advantages to which we have alluded are only in part such as can be attained by means of the printing press. We may discuss them, as they affect medical men themselves, the general public in their relation to practitioners, and, lastly, entire nations. To a member of the class first mentioned the atmosphere of free discussion is helpful in several ways. In it he is able freely to communicate and compare ideas, and to question directly the exponents of theories or methods in which he is interested—no small benefit in a profession like our own, in which demonstration is everything for purposes of instruction. He is better able also, in concert with others, to arrange plans for combined action with regard to a given subject. Take, for example, the system of collective investigation as applied to disease. Whatever may be the total results of that mode of research, it cannot be denied that there is truth in the remark made by Dr. Nathan S. Davis, the president at the late Congress, that in order to explain many of the phenomena of disease the intelligence of well-informed general practitioners is required, and that the plan of conjoined investigation, with the assistance of the check imposed by a central and critical authority, is calculated to utilise this intelligence. It is probable, however, that no greater good is conferred on the individual worker by association with his fellows than the stimulus to friendly and wholesome rivalry. Labouring alone and striving through repeated failures to explain the unknown, he may find himself often unduly sobered by the shadow of the uncertainties which confront him. United with others who share his experience, but arrive at last in the open light of certainty, he is fortified by hope, and, carried forward by an invigorated confidence, reaches in time the desired end of his efforts. The success of others has an infection about it, and it is well, therefore, to place oneself within its influence. Let us, too, before we leave this subject, remind ourselves how greatly the recreation and good fellowship with which the leisure intervals of all such meetings abound can refresh both mind and body, and we will no longer doubt that in this respect they have their value. But the non-professional public also profit in illness by the congresses of their advisers, and this directly. They are thus enabled, we may say, to make friends with the medical fraternity, and to know them better as a class. They are in a measure taken into confidence, so to speak, and through newspaper reports can follow with understanding no insignificant part of such debates as do not require much technical training for their apprehension. The public well-being is benefited by the reception of such filtered knowledge, provided this does not engender a spirit of presumptuous self-confidence, and this it will not do in the mind of any sensible reader. The consequences of this better understanding of general principles is to make the person instructed a more intelligent patient in illness, to engender a generally better acquaintance between the invalid and his adviser, and to aid the formation of a true estimate of the value of medical service. Furthermore, those who may have noted in the diversity and disparity of qualifications, in varieties of treatment, and in the jealousies of individuals which at times disturb the current of professional unity, only so many evidences of disagreement, have in meetings such as that which has just ended overwhelming proof that the body of medicine remains, notwithstanding, substantially one whole. Mr. Bayard, Secretary of State, in his opening address, dilated on the benefits of international intercourse, and rejoiced that there is among men of all nations a sense of brotherhood which is tending more and more to assimilate them in spite of the distinctions imposed by geographical separation. He viewed the Congress in its unprofessional aspect as an expression of this feeling; and such, indeed, it was. It is not certainly to be expected that meetings of this kind, however universal in their membership, however influential, will rapidly remove the barriers of racial difference, fortified by national interests and the political forces by which these are naturally and justly supported; but there is good hope, notwithstanding, that they will gradually effect at least a salutary modification of that difference. Men cannot meet together to consider measures of sanitary precaution and means of cure which are applicable in every quarter of the globe without in some degree losing sight of their narrow personality, even their nationality, in grasping as they firmly can the real and wider, if less definite, consciousness of a common good for all, which they may peacefully strive after and peacefully enjoy. It is our happiness to reflect that in the early dawn of that still shadowy peace the profession whose function is the relief of pain in mind and body has been well committed to the work of reconciliation. Such and other truly civilising efforts may encourage us in the conviction that He who through all hindrances and apparent contradictions seeks the final good of the world He has created, will one day guide mankind into that state which one of our own countrymen has foreseen and prefigured in words of classic beauty and prophetic force—wherein

> "The war-drum throbb'd no longer, and the battle-flags were furl'd,
> In the Parliament of Man, the Federation of the World."

HEALTH OF THE ARMY.

No. II.

THE strength of European troops in India during the year averaged 57,165; the admissions into hospital were 1522; the deaths, including those of invalids on the passage home, 15·18; the invalids sent home, 22·79; and the constantly sick 70·58 per 1000. With the exception of the invalided to England, these ratios are all higher than in 1884, and the admissions and mean sick are above the average of the last ten years. The distribution of the sickness and mortality in the three Presidencies were as follows:—

—	Average annual strength.	Ratio per 1000.			
		Admitted.	Died.	Invalided home.	Constantly sick.
Bengal	35,101	1649	13·61	20·34	73·17
Madras	10,414	1162	9·79	24·10	65·87
Bombay	11,650	1460	24·72	29·01	67·00

This summary shows Madras to have been the most healthy of the Presidencies; and, although Bengal furnished the highest proportion of admissions and mean sick, Bombay had much the highest death-rate—results which accord with those of 1884. In Bengal the admissions corresponded very closely with those of the preceding year, but were considerably above the average of the decennial period, the excess being chiefly in syphilis, gonorrhœa, and injuries, while there was a decrease in fevers and in diseases of the digestive system. The deaths were slightly higher than in 1884, but above 5½ per 1000 under the average of the last six years, the reduction being chiefly in cholera and in diseases of the digestive and nervous systems. The admissions into hospital in the different military divisions ranged between 2422 in the Meerut and 1258 in the Rawal Pindi. The highest ratio at any station was 4156 per 1000 at Delhi, and the lowest 1015 at Ranikhet. The death-rate was highest in the Meerut division, amounting to 17·33, but was nearly the same in the Allahabad, and it was lowest in the Rohilcund division, being only 9·45 per 1000. The highest ratio at any station was 41·78 at Muttra; at Jhansi no death occurred, and at fifteen stations it was under 1 per cent. The admissions by eruptive fevers were greatly above the average, owing to the prevalence of dengue at Lucknow, Umballa, Calcutta, and Fyzabad; there were altogether 726 cases, but no deaths. Enteric fever was the cause of 486 admissions and 142 deaths, being in the ratio of 13·8 and 4·05 per 1000 respectively. The stations at which it was most prevalent were Allahabad and Cawnpore in the Allahabad division, Lucknow, Sitapur, and Fyzabad in Oudh, Morar in Gwalior, Meerut and Muttra in Meerut, Meean Meer in Lahore, Rawul Pindi, and Cherat in the Peshawur division. Only 1 case occurred among troops on the march, and 2 in the camps of exercise. The disease was most prevalent in the third quarter of the year. Lucknow was the station which furnished the greatest number of cases, there having been 55 admissions, but with only 10 deaths. The medical officer in charge states that "in no instance could the disease be traced to insanitation, or to faults in connexion with food or water." At Morar there were 30 cases and 11 deaths; "It was not possible to assign any cause for the disease; no sanitary defects of any importance were observed, the milk and water supplies were carefully attended to, and the prevalence of the disease, in the opinion of the medical officer, could only be attributed to climatic causes and to individual susceptibility." At Cherat defective latrine arrangements were considered to have been in some degree a cause of the disease, and at Sitapur an insanitary condition of one of the barracks was assigned. At most of the stations, however, it was found impossible to determine anything definite on the subject. The cases occurred mostly, though not exclusively, among young soldiers with a short period of residence in India. Paroxysmal fevers were the cause of nearly one-third of all the admissions into hospital, but were not of a very fatal character. The troops were remarkably free from Cholera during the year, only 61 cases having been admitted; but of these 37 died. It was pretty widely spread, but the greatest number of cases at any one station was 7 at Lucknow, and of deaths, 5 at Fortress Gwalior. Thirty-six of the cases and 22 deaths occurred in the third quarter of the year. It is not stated what precautions were taken on the appearance of the disease at any of the stations except Allahabad, where after the occurrence of 5 cases "the troops marched out and the disease ceased." There was a considerable increase in the cases of syphilis, especially in the Rawal Pindi, Allahabad, and Presidency circles; the only divisions in which there was a decrease were Saugor and Gwalior. There was also an increase of gonorrhœa, most marked in Peshawar and Saugor. Under diseases of the nervous system 80 cases of sunstroke were admitted, with 26 deaths, and there were 3 fatal cases of hydrophobia, 2 at Dum Dum in men who had been bitten by the same dog, and 1 at Umballa. Dysentery and diarrhœa gave rise to 81 admissions and 0·37 deaths, and hepatic disease to 21 admissions and 0·88 deaths per 1000 of the strength, the admissions being somewhat under, and the deaths about half, the average of the preceding six years. Under the head of poisons, 324 admissions and 7 deaths were recorded from the direct effects of intemperance, being in the ratio of 9·3 and 0·20 per 1000; the only other case was one of opium poisoning, which recovered. The deaths from injuries were in the proportion of 1·36 per 1000, which closely approximates the average.

The sickness and mortality in the different arms of the service in the Bengal command were as follows:—Cavalry, 1962 admissions, 17·01 deaths, and 83·1 constantly sick per 1000 of strength; artillery, 1751, 10·67, and 79·90; infantry, 1635, 12·52, and 71·05 per 1000. The cavalry therefore seem the most unhealthy, the artillery have the lowest death-rate, and the infantry the least amount of inefficiency from sickness. The distribution of the mortality and invaliding in the different grades is shown in a table in the appendix to have been—death-rate of officers 11·27, non-commissioned officers 18·47, privates 14·35; and the invaliding of officers 50·30, non-commissioned officers 18·23, privates 19·72. It is very probable that the lower death-rate of the officers may, to some extent at least, be due to the greater facilities afforded them for invaliding, while the higher rate of non-commissioned officers as compared with privates may be a result of their more advanced age. The mortality of the women during the year was 13·29, and of the children 53·04 per 1000. Convulsions were the most frequent cause of death among the latter, having given rise to upwards of one-fifth of the whole. There were only 2 deaths by cholera among the women, and the same number among the children.

The only serious complaints of sanitary defects appear to be one of the impure water supply at Dum Dum, and another of the very unsatisfactory construction and insanitary condition of the Sanatorium at Cherat. Recommendations on both of these points have been made, which it is trusted may be carried out with beneficial results.

In Madras there was an increase in all the ratios except invaliding compared with those of 1884, but they were all under the average except the constantly sick, which shows an increase of above 5 per 1000. The admissions in the different military circles ranged between 995 in the Belgaum and western district and 1228 in Burmah, the highest ratio at any station, omitting the depots, being 1461 at Toungoo. The deaths were from 2·91 in the Nagpore circle to 12·66 in Burmah, and the mean sick from 54·26 in the Nagpore to 86·35 per 1000 in the eastern district. There was a decrease in fevers compared with 1884, and they were considerably under the average of the last six years. The Nagpore force furnished much the highest proportion of cases, owing to the prevalence of paroxysmal fevers, but it had the lowest death-rate from this class. There were 73 cases and 23 deaths of enteric fever, being in the ratio of 7·0 and 2·21 per 1000. Secunderabad was the station at which it prevailed most, there having been 29 cases and 10 deaths; Bangalore had 18 cases with 1 death, and Bellary 8 cases and 2 deaths. At Secunderabad no insanitary condition could be traced in the barracks, and the disease is believed to have been "contracted in some of the villages situated close outside cantonments, which are generally in a filthy condition." At none of the stations could the origin of the disease be traced to any definite cause except at Calicut, where it was believed to be an impure condition of the water-supply. A case at Cannanore and one at Toungoo were attributed to "bad water drunk on the march." Of cholera, only

6 cases and 2 deaths occurred, 4 with a death at Secunderabad, 1 fatal case at Kamptee, and one which recovered at Toungoo. Venereal diseases were considerably above the average, the highest ratio being 411 in the Bangalore circle and the lowest 217 in Burmah.

The sickness and mortality by arms of the service were—in the cavalry, 1140 admissions, 6·76 deaths, and 58·56 constantly sick per 1000 of strength; in the artillery, 1181, 9·11, and 65·13; and in the infantry, 1155, 8·46, and 63·24. The cavalry, therefore, were, in all these particulars, the most healthy and the artillery the most unhealthy. The deaths and invaliding in the different grades were as follows:—Officers, 7·71 deaths, 51·41 invalided; non-commissioned officers, 18·47 and 41·76; and privates, 7·66 and 20·61 per 1000 of strength. As was the case in Bengal, the death-rate of the non-commissioned officers was much higher than of the privates, and the invaliding of officers much above that of the other grades; the death-rate of officers and privates corresponds very closely. The mortality of the women was 13·33, or almost identical with Bengal; that of the children was 31·87 per 1000; there was one fatal case of cholera in each class.

In Bombay the admissions, deaths, and mean sick were higher, but the invaliding slightly lower, than in 1884; the deaths and mean sick were greatly in excess of the average. The highest ratio of admissions (2206) was at Quetta and the lowest (1071) in the Presidency circle. The deaths ranged from 85·23 at Quetta to 10·90 in the Poona circle; the lowest death-rate was at Ahmednagar, where it only amounted to 2·18 per 1000. The excessive sick-rate at Quetta was due to paroxysmal fevers, and the death-rate to cholera and dysentery. Enteric fever was the cause of 88 admissions and 30 deaths, being in the ratio of 7·6 and 2·57 per 1000 of strength. Kurachi was the station at which the greatest number of cases (19 with 4 deaths) occurred; Deesa and Quetta had each 14 cases and 4 deaths, Nasirabad 10 cases and 4 deaths, Poona 8 with 5 deaths, and Belgaum 7 with 4 deaths. At none of the stations could the disease be traced to any insanitary conditions in or near the barracks, or to the water supply. "The disease is said to be endemic in the city of Kurachi, and is in great measure due to the cesspool system in vogue there." Paroxysmal fevers were the cause of the highest ratio of admissions into hospital, amounting to 450 per 1000 of strength. Quetta was the station at which they were most prevalent, the ratio being as high as 1178, and the deaths 4·32. The Presidency circle had the lowest ratio. Of cholera there were 131 admissions and 85 deaths, being in the ratio of 11·2 and 7·30 per 1000. There were no cases in the Poona circle; the only station in the command at which it prevailed to any extent was Quetta, where there were 103 cases with 67 deaths in an average strength of 1619 men, or 63·62 and 41·38 per 1000. There were 14 cases and 8 deaths among troops on the march. The first case in the Quetta Valley was on June 3rd in the 1st Oxford Light Infantry, and the last case occurred in October. Notwithstanding numerous removals, the disease continued in this regiment until it finally quitted the valley. The death-rate of the corps during the eight months it was in the Quetta Valley was 129·54 per 1000, but the information is not given in sufficient detail to enable us to state the proportion due to cholera and to fever or other diseases respectively. The death-rate of the other infantry regiment at Quetta, the 1st North Lancashire, for the year, was 56·78 per 1000, while that of the Royal Artillery was 41·01 per 1000. Diseases of the digestive system were the cause of a high death-rate (5·06 per 1000), though the admissions were under the average of the preceding six years. The excessive prevalence and mortality chiefly took place in Quetta, where the cases amounted to 311 and the deaths to 19·76 per 1000 of strength, the latter mostly from dysentery. The admissions from the direct effects of intemperance—delirium tremens and alcoholic poisoning—were in the proportion of 9·53, and the deaths of 0·60 per 1000.

The relative sickness and mortality in the different arms were: in cavalry, 1221 admissions, 6·71 deaths, and 65·9 mean sick; artillery, 1446, 16·46, and 65·5; and infantry, 1590, 26·85, and 72·6 per 1000; so that, as in Madras, the cavalry were the most healthy. The excessively high rates in the infantry were the result of the large number employed in the Quetta Valley; and the low death-rate of the cavalry may be accounted for by their not having been stationed in that pestilential district. The deaths and invaliding of the different grades in the Bombay command were: deaths of officers 16·44, non-commissioned officers 31·59, privates 22·87 per 1000; invalided—officers 68·5, non-commissioned officers 43·8, privates 26·7. The same feature therefore is observed, as in other Presidencies, in the high rate of deaths of non-commissioned officers, and the much lower rate, but with a high one of invaliding, among the officers. The death-rate of the women was 12·82 per 1000, which corresponds very closely with that of Bengal and of Madras; and of the children it was 53·40, the same as Bengal, but considerably higher than Madras.

The report on the health of the troops in Egypt includes those quartered in Lower Egypt for the year—the Frontier Field Force from Aug. 1st to Nov. 25th, and the garrison of Suakim from May 15th to the end of the year. The details of the Frontier Field Force and the troops at Suakim in the earlier months were given in the department volume for last year. The average strength of the force was 9593, the admissions were in the ratio of 1522, the deaths 28·98, and the mean sick 80·23 per 1000. The incidence of sickness and mortality was much greater in the small force at Suakim than in the other two divisions. Enteric fever was the cause of 497 admissions and 136 deaths in the whole force, or in the ratio of 51·8 and 14·18 per 1000 of strength, the latter amounting to half the death-rate of the command. The highest proportion of cases and deaths by this disease occurred amongst the troops at Suakim, and the next in the Frontier Field Force; of the cases in Lower Egypt, many were believed to have been contracted at Suakim or on the Nile expedition. The disease is stated to be endemic along the whole Nile Valley. At Suakim "there is no evidence connecting the occurrence of enteric fever with contamination of the water supply or food"; but in Lower Egypt "the insanitary condition of the towns is so bad that it is not surprising that men suffer severely from this disease, notwithstanding that every precaution is taken in barracks." It is noteworthy that the men confined in the military prison enjoyed a marked exemption from enteric fever, only one case having occurred in an average of over 60 prisoners. Paroxysmal fevers occurred almost entirely among the troops in Lower Egypt, and especially in the 2nd Battalion, Sussex Regiment stationed at Suez. "It happens that the camp at Suez is very low-lying, water being obtainable only two feet from the surface, and the whole of the land in the country is wet on account of irrigation and percolation from the fresh-water canal which passes close by. The inhabitants of Suez suffer from these fevers every autumn. There is practically no malarious disease in the other stations in Lower Egypt"; but as regards Suakim, "there can be no doubt that the station is, as might be expected from the condition of the soil and drainage, distinctly malarious." Syphilis and gonorrhœa were a cause of great inefficiency in Lower Egypt, the admissions having amounted to 370, and the constantly non-effective to 23·35 per 1000. They were much less prevalent in the other two portions of the force. Sunstroke and exhaustion from heat gave rise to a very large number of admissions and deaths at Suakim, the former having amounted to 60, with 15 deaths, and the latter to 216. "The Principal Medical Officer remarks that the insufficient protection from the intense heat of the sun during the hotter months afforded by tents, was probably to a considerable extent accountable for this; but he thinks that the excessively high temperature in conjunction with the moisture and the stillness of the air would probably, however, with the best possible accommodation be largely productive of these conditions." No cases of cholera occurred during the year. Diseases of the digestive system furnished the highest ratio of admissions, and also, with the exception of fevers, of deaths, the most prevalent diseases being diarrhœa, dysentery, dyspepsia, hepatic affections, and tonsillitis; dysentery was the most fatal. There was a death from poison, caused by chloroform which was being administered for the performance of an operation.

The following extract from the report of the sanitary officer sufficiently accounts for the very high ratios of sickness and mortality among the troops quartered at Suakim. "The ground in the neighbourhood of the town is extremely polluted. Owing to the very slight elevation of the land, only a few feet above the sea level, there is no outfall for drainage, and the long neglect of sanitary precautions by the natives has led to the soil becoming saturated with filth of various kinds. The water in the harbour rises and falls at irregular intervals, the variation in its level being apparently dependent on the direction of the wind. The low-lying land to the west is thus frequently inundated, and on the subsidence of the

sea presents an extensive surface of organic decomposition. Under the same circumstances the sloping coral reefs to the south, alternately covered and exposed to the sun, emit offensive organic effluvia." To this must be added the intense heat and the inadequate protection afforded to the troops by tents.

In an average strength of 344 officers the admissions were 1235, the deaths 26·16, and the invalided 238 per 1000, "the latter being greatly increased by the effects of the Suakim and Nile campaigns."

From the table showing the sickness and mortality by corps, we find that the admissions were, in the cavalry 1909, artillery and engineers 1547, infantry regiments 1523, departmental corps and staff 1214 per 1000; and the deaths were 45·45, 38·97, 24·80, and 47·62 in the arms respectively. The departmental corps and staff, therefore, had the lowest ratio of admissions and the highest of deaths, while the proportion of both was higher in the cavalry than in the ordnance and infantry.

HYGIENE IN THE SCHOOL ROOM.

GREAT as has been the advance made in recent times in a general appreciation of the value of preventive medicine, there still exists widespread ignorance and consequent apathy on many points of vital importance to the community at large. Nowhere is this more conspicuous than in the school room, where, notwithstanding the lively interest which the work of education awakens at the present time, insalubrious conditions exist sometimes to a positively shocking extent.

These reflections are suggested by the general tone of the recently issued Education Report. "It is time to attempt some further progress lest we go back," is the language of one of the chief inspectors, and it not inaptly expresses the general drift of comment. This would be highly satisfactory and very laudable if the solid facts of the case justified such a rose-coloured view of the nature of our actual achievements. But we strongly suspect that we are much nearer the beginning than the end of our task, and that the directions in which improvement must be sought are sufficiently obvious to call for energetic effort without the somewhat artificial stimulus of a dread lest we should lose the ground already gained. To school managers throughout the country, and especially to the central department, which, by its elaborate organisation, exerts an enormous influence on the national education, we commend a few points well fitted and well worthy to tax their endeavours for some time to come.

WARMING AND VENTILATION.

To these two closely connected and most important features of school-room hygiene the references throughout the report are extremely few and meagre. But such as they are, they show conclusively that the prevailing condition is highly unsatisfactory. "It is still," writes one inspector, speaking particularly of the north of England, "quite a common thing at visits without notice to find the air of schools, especially in the class rooms, unwholesomely close." The evil, however, is by no means confined to the north. Even more emphatic is the testimony of the chief inspector for the Welsh division. "The ventilation of schools," he says, "is seldom good"; and he casts the blame partly on the appliances supplied, but in part also upon the teachers, who often fail, in his view, to turn such appliances as they have to good account. As to the latter part of this complaint, there ought to be no difficulty whatever in finding a remedy for the mischief complained of. A due appreciation of the importance of the point on the part of inspectors and managers would soon arouse teachers to a sense of their duty, and the judicious distribution of a few thermometers would not only give a business importance to the regulation of temperature, but would also enable visitors to exercise a much more effective supervision than is at present possible. It is easy to understand that when the inspector thinks a room over-heated, or unequally warmed, or at too low a temperature, or insufficiently supplied with fresh air, the teacher may entertain an opposite opinion, and as the teacher is always in command, while the visitor's authority is very transitory, it is the teacher's view which must generally prevail. On this footing it will be a hopeless task to attempt effecting improvements; but much might be done by the simple expedient to which we have alluded. Thermometers will not, indeed, disclose all that it is worth while to know respecting even the warming of an apartment. But two instruments, suitably placed, so as fairly to exhibit the extremes of temperature to which occupants of any room are exposed, will always be a valuable addition to its furniture, and, seeing that thermometers are inexpensive, we think that these should be an indispensable part of the equipment of every school room.

Even in the matter of stoves, although the difficulty looks more serious, the appearance is greatly worse than the reality. The obstacle to improvement in this respect is, of course, the financial one. But that is in a large degree imaginary, for an inefficient stove is a most wasteful contrivance. The cost of substituting something better may be recovered many times over in the consequent saving of fuel. No doubt in many places there are buildings in use for school purposes so incorrigibly bad that nothing short of reconstruction would suffice to make them reasonably fit for occupation. In such a case the renovation must no doubt be a work of time. But where it is only a question of replacing an open grate, or making, at a small outlay, some improvement in the heating apparatus, we think that the central authorities might usefully bring pressure to bear upon reluctant managers, for not only would the hygienic conditions of the school be improved, but also, in most cases, a considerable and more than commensurate saving in the cost of fuel would be effected. A little assistance to the local imagination in grasping a fact like this is often the best service that the central authority can render. How much this whole subject needs bringing forcibly to the attention of school managers is well illustrated by the case of the Eccleston School Board. The members of this Board, with the most commendable zeal, take upon themselves the duty of inspecting the schools under their management. On these occasions the visitor is provided with a schedule of questions directing his attention to the various points which he is expected to observe, and these questions with his answers he files after the visit. Of this plan it is impossible to speak too highly, and of the schedule itself it may be said that it has evidently been drawn up with great care, and is in many respects an excellent production. But although it travels over the field of hygiene, and puts such questions as "Does the heating apparatus act efficiently?" there is no reference at all to the temperature or ventilation of the school or class rooms. "If these things are done in a green tree, what shall be done in the dry?"

APPLIANCES.

Another point to which the majority of the inspectors do not seem to be keenly alive is the defective nature of the appliances with which most of our schools are fitted. Desks are made unsuitable both in size and shape. Windows are rendered needlessly hideous with ground glass, and sometimes so situated that it is impossible to obtain an incident ray from the proper angle for writing by. These points are so well put in Mr. Blakiston's report that we gladly avail ourselves of his statement of them:—

"At a properly constructed desk, the lower edge of which overlaps the seat from one to two inches, at a height sufficient to allow the forearms to rest horizontally, and where a rail attached to the back of a broad and hollowed seat supports the loins, writing may be done for an hour or more at a stretch without any sense of discomfort, or any injury to eyesight or spine, if an upright position of the body be maintained, and if the writer keep his elbows by his sides and his pencil or pen pointed to his right shoulder. Unfortunately many thousands of our schools are supplied with desks made with utter disregard to the comfort and health of the scholars. The seats, flat rails some six inches broad and without back rests, are fixed so far from the desk for ease of ingress and egress, that in writing the children sprawl on the desks with elbows out, bodies forming an angle of 45° with the bench, twisted spines and contorted shoulders, the head often resting on the left arm, both eyes too near to the paper, and the left eye nearer than the right. Very often the height of the benches suggests that they have been supplied for the comfort of adults on Sundays and in evening meetings, to the consequent discomfort of the children, whose legs dangle restless during the week-day sittings. In planning schools it is of great importance that light should be duly admitted on the left shoulders of the children. If the light come from the south, blinds should be so arranged as to be drawn *upward*, so as to exclude the dazzling rays from the eyes, but not to darken the upper air of the room. Non-transparent glass, the use of which throughout spoils many a good school room, should be used only in the lower panes, and that only where a school can be overlooked from without. Where it has been found impossible to rearrange desks so as to have the light from the left, the insertion of fixed skylights on the northern slope has in hundreds of cases made it possible to secure the best light and to carry on school work that had been before impracticable in dark hours."

Elsewhere another inspector writes—not, surely, without reason: "I think the subject of desks and their position in the school demands serious attention."

INFECTIOUS DISEASE.

It might be supposed that if there is one branch of school hygiene which is universally understood, and about which there is an absolute consensus of opinion, that point is the treatment of epidemic disease. Yet such is the prevalent supineness in relation to this matter that we find an assistant inspector, Mr. Myers, in the course of some very interesting and valuable remarks on the waste involved in school epidemics, pleading for the simplest and most obvious precautions against infection. "I am not," he writes, "pressing for any specific enactment on the matter. I think, indeed, that school boards and school attendance committees should require (and perhaps in some cases pay for) a medical certificate of non-infectiousness before a child who has been ill in this way returns to school." We quite agree with him, and trust that, without waiting for Parliament to move, the Education Committee will take steps to bring this elementary lesson home to the local authorities all the country over. It is appalling to think how unrebuked carelessness in a matter such as this may daily promote disease; how vast the number may be of children needlessly exposed for lack of the simplest precautions to peril of their lives; and how large an aggregate of sickness and death may be traceable to such easily preventable causes. Upon the whole, then, there is plenty of work for the department at present, if only in the development of school-room hygiene. Alexander may spare his tears, for a whole world still awaits conquest at his hands.

SANITARY INSTITUTE OF GREAT BRITAIN.

THE Annual Congress of members of the Sanitary Institute of Great Britain was opened at Bolton on the 20th inst., under the presidency of Lord Basing.

The first item in the day's proceedings was a reception by the Mayor, Mr. Alderman Fletcher, at the Town Hall, where they were afterwards entertained to luncheon. An exhibition of sanitary appliances and apparatus which is held in connexion with the meeting of the Congress was afterwards opened by the Mayor in the Drill Hall, and subsequently the members visited a number of public buildings and other places of interest in the town. The first general meeting was held in the Albert Hall in the evening, which was largely attended.

Lord Basing, in his address, briefly reviewed the history of the statutory and other steps which had been taken of late years in relation to sanitary science, dwelling especially upon the work of the Royal Sanitary Commission. After analysing the work done during the last few years by the Local Government Board, Lord Basing recapitulated some of the amendments which have been proposed to the Public Health Act, 1875, and stated that he felt bound, as the final result of his experience, such as it had been, to say that, having regard to the comparative novelty, to the difficulty and obscurity of the subject, to the dislike of control, and to the great expense attending works of sewerage and water supply—still more, when we remember the disinclination of Parliament to turn aside from the more stirring and generally interesting matters which make or mar the fortunes of Governments and parties, he felt more than satisfied, on looking back over a period of thirty years, to find that so much has been really accomplished. At this moment his apprehension undoubtedly was that in the anxiety to escape the irksomeness of detail, and in the hurry to establish local government generally on a wider and more popular basis, mischief may unwittingly be done through misappreciation of the difficulties under which that which now exists has been built up, and of the great risk which may be run if such central control as is really still required were to be hastily surrendered. Lord Basing concluded his address by quoting the illustrations of progress which had been given by Mr. Edwin Chadwick.

After the delivery of the address, a cordial vote of thanks was passed to the President, and the meeting adjourned.

At the meeting of the Congress on the 21st inst., the address to Section 1, on "Sanitary Science and Preventive Medicine," was read by J. Russell Reynolds, M.D., F.R.S., Emeritus Professor of Medicine in University College, London. He observed that the causes of disease with which preventive medicine has to deal are so numerous and so various that it was first of all necessary to arrange and classify them in some logical order. This he attempted to do, pointing out that the devices that must be employed to prevent the development of further progress of inherited disease are as manifold as the affections themselves. On this head he remarked—first, there is no disease that has yet been shown to be always hereditary in its origin, so that when we meet with insanity or phthisis in an individual we are not at once to conclude that it was "inherited" because a parent had been epileptic or a grandparent had died of consumption. A large proportion of hereditary diseases can be traced to no hereditary source in particular individuals. Therefore we must allow that in a large number of cases where the possibility of inheritance is patent a certain number may have developed the disease *de novo*. Secondly, with regard to many, the anti-hygienic conditions and habits which have led to disease in ancestors may be persistent as cherished heirlooms and be effective for mischief now. Especially is this the case in respect of the large group of diseases of the nervous system. There is much more than the mere physical contamination by descent in the etiologic conditions of a boy or girl who may be brought up in constant association with an idle, self-indulgent, hypochondriacal, or drunken father; and it is quite impossible to over-estimate the dire misfortune to a girl of being educated by an hysterical mother. No high powers of the microscope are needed to discover the *modus operandi* of the *materies morbi* of the contagion of bad example. If there are occasional examples of hereditary "nervousness" or simple epilepsy, there are also of tubercle, scrofula, Bright's disease, and others, about which it may be truly said "the whole head is sick, the whole heart is faint, and there is no soundness in it." Yet even in extreme cases preventive medicine has its work to do. The condition of ill-health most frequently met with in hereditary diseases of the nervous system is one of undue liability to disturbances given in any one of the antecedents of a particular individual, either insanity, epilepsy, hysteria, tendency to excesses, great nervousness, or what not. The outcome may be any one of the maladies mentioned, not being at all necessarily a reproduction of the initial disease. It is by bearing this fact in mind that the physician will see the necessity of being armed at all points. It is not enough to avoid or counteract the tendency to convulsions in the first dentition and the second or third; but chorea, hysteria, wilfulness, tricky ways, cruelty, and deceit must be borne in mind. No routine practice will be useful; it is often worse than useless. In some subsequent observations on sexual difference, Dr. Reynolds said it is worthy of note that it is not the highest qualities of man that young women imitate, but rather, on the one hand, the roughness of the youth, his bravado and uncouth language, or, on the other, the lackadaisical, *nil admirari* tone of the pedant and the fop. With it may be an occasional dash into imitation of excessive learning and the habits of the ascetic or recluse. The men who mock women's ways also mock their foibles, not their strength, and lisp and sigh or groan out their unsatisfied longings in vapid admiration of sentimental nonsense, whether it be in poetry, music, or painting, and find out something "quite too lovely" in a line, a strain, or a daub that no sensible man would care to hear or see again. The great source of disease, said Dr. Reynolds, against which preventive medicine has shown its strongest powers, and with which it now wages war the most vigorously and incessantly, is the introduction of noxious matter, either with food, by the air we breathe, or by direct inoculation. Further on in his address he added that in this part of the nineteenth century we come into contact with excess of work—mental, moral, and physical—on almost every hand. Mental work is not excessive if the appetite be good and the sleep sound.

On the motion of Lord Basing, seconded by Dr. Carpenter, a vote of thanks was given to Dr. Reynolds.

Mr. Sergeant, medical officer of health for Bolton, followed with an address describing a decade of sanitary improvement in the town, showing a decreased death-rate, the erection of a fever hospital, the establishment of disinfection work and sewage works; and he specially dwelt on the Corporation powers for the compulsory notification of disease, of which he spoke highly. In the case of small-pox, the disease, he said, could be kept in almost perfect check, and scarlet fever restrained, and there was less danger of the disease being spread by children attending school,—

Mr. North, medical officer of health (York), bore testimony to the benefit which had accrued to York from the adoption of compulsory notification of disease. Without it they could not have discovered the source of a grave outbreak of typhoid fever, due to infected milk.—Professor Corfield also supported the system, and pointed out the fact that the death-rate from zymotic diseases in Bolton had fallen from 20·2 to 16·2. He advocated the closing of schools to prevent the spread of measles.—Mr. E. C. Robins and Dr. Carpenter spoke in favour of the water-carriage system in preference to the pail system for the removal of sewage, and the latter added that for thirty years he had advocated the notification of infectious diseases; but he contended that the notification should be made by the medical man to the occupier, and not to the medical officer direct.—Dr. Tatham (Salford) having added his testimony to the advantages of the notification of diseases, Dr. Macfie (Bolton), whilst admitting that the majority of Bolton practitioners differed from him, agreed with Dr. Carpenter, and held that though the law was enforced as it was, in Bolton cases were kept secret.—Mr. Sergeant having replied, a vote of thanks was passed to him.

Dr. Livy, J.P., Bolton, read a paper on the "History and Progress of Public Health." Dr. Alfred Carpenter contributed one on "Our Pioneers," referring especially to Dr. Parkes and Dr. Farr; and Mr. D. M'Keown (Manchester) one on the "Prevention of Blindness," which recommended a Governmental instruction of people by cards, distributed by the registration officers, giving advice as to the treatment of infants' eyes.—After the reading of the latter paper the Congress rose.

In the evening a conversazione was given in the Albert Hall by the Mayor, Alderman Fletcher, to which 750 invitations were issued.

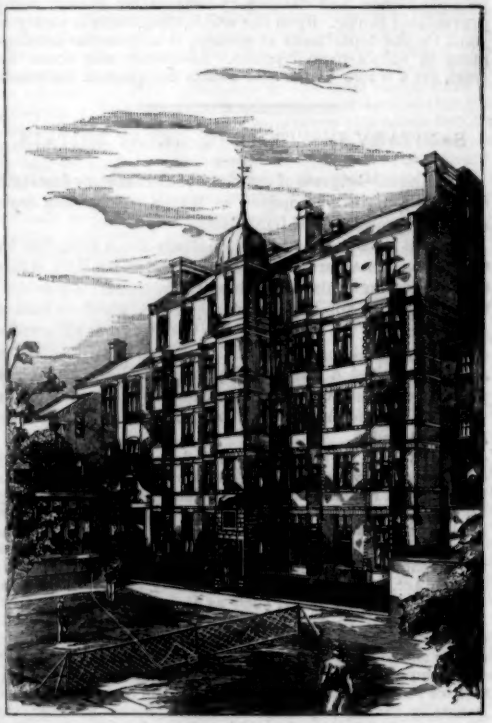
THE CONGRESS OF GERMAN PHYSICIANS AND NATURALISTS AT WIESBADEN.

THE most interesting feature of this—the sixtieth—assemblage of the medical and physical *savants* of Germany is the Exhibition of Scientific Apparatus in the great hall of the Government Buildings. At 10 A.M. on the 15th inst., Dr. Ludwig Dreyfuss delivered the opening address on the aim and character of the Exhibition. In convenient space and in comprehensive *ensemble* the collection places on view the achievements of the last few years in the apparatus and appliances for research in physics and in natural history, for instruction in these departments, and for the tuition and practice of the healing art in its great branches of medicine, surgery, and public hygiene. It enables the members of the Congress to become practically cognisant of the newest and highest improvements in the working tools of their several specialties, to compare them with those hitherto in use, and to suggest still further modifications in the direction of increased efficiency. A hearty vote of thanks to the liberal exhibitors concluded the address, coupled with a special compliment to the representatives of the Berlin committee, Geheimrath Bardeleben and Dr. Lassar, for their effective co-operation. The Exhibition was thereafter consigned to the Congress, in whose behalf Professor Fresenius expressed the gratitude of the members, and dwelt on the signal utility of the collection as an earnest of still higher achievements in the same field. No fewer than 491 scientific instrument makers have contributed the choicest specimens of their handiwork, which occupy several spacious rooms. Of the members already assembled there are over 200, and an elegantly got up publication in connexion with the Congress contains two treatises of more than local interest: the "Water Supply of Wiesbaden," scientifically handled by the director of the works and the "Canalisation of Wiesbaden," by the engineer, Herr Brix—also comprehensive and instructive. Chemical Analysis is represented by Professor Fresenius, and Bacteriology by Dr. F. Hueppe.

INDIAN LADY DOCTORS AND THEIR FEES.—Complaints are finding vent in India on the question of the amount of fees demanded by the lady practitioners amongst the native population. Says the *Lahore Tribune:* "People in India are willing to pay two rupees for a visit, but cannot give more, except on the occasion of a first call, and the natives think that, as Lady Dufferin's Institute is aided by subscriptions, the doctresses ought to be moderate."

THE NEW RESIDENTIAL COLLEGE AND SCHOOL BUILDING AT THE MIDDLESEX HOSPITAL.

ON a site of ground, having a frontage in Cleveland-street on the one side and overlooking the garden at the rear of the hospital on the other, has been erected this year a building designed and constructed expressly for the purpose of affording to medical students a comfortable college home in close proximity to their work. The garden frontage, which forms the principal elevation, consists of a red brick building, six storeys in height and relieved by bay windows, constructed of buff-coloured terra-cotta, giving the building a very bright and cheerful appearance. The style of architecture is an adaptation of late Elizabethan mullioned and transomed windows, with classic mouldings. The College is calculated to contain about thirty students, each of whom is provided with an apartment shut off from the main corridor by double doors. This apartment comprises a sitting



room, well lighted and comfortably furnished; the sleeping accommodation is in the same room, divided off by a curtain and having a separate window. In addition, there is on the ground floor a fine large dining hall, a large common reading and recreation room, and a good-sized study.

The sanitary arrangements are all contained in a tower running the whole height of the building, thus being separated from the main block by a passage freely ventilated on either side. Students residing in the College will pay so much rent for their rooms, and be provided with meals in hall at a tariff which is very moderate, or they can arrange for terms, including board. A Warden will reside in the College, and one of his chief duties will be to assist the students in their work in the evenings. The domestic arrangements are under the management of a resident steward.

The College has been erected by the friends and supporters of the hospital and medical school, and we heartily wish the scheme all the success which its enterprise deserves. Every effort appears to us to have been made to give the student

a healthy home, with all reasonable comfort; and the many advantages which he must possess in residing practically on the hospital premises must be obvious to everyone. He will be free to enjoy the companionship of his fellows, or, if he desires, he can completely shut himself up in the quiet and privacy of his own room; whilst his proximity to the hospital will afford him opportunities of visiting the wards, and of gaining experience from the emergency practice, which those living at a distance away cannot possibly enjoy. The rules and regulations of the College, we are glad to find, are such as to secure the social advantages of a college life without irksome restraint.

Adjoining the College a very important and extensive addition has been made to the medical school buildings. The new building consists of four storeys. In the basement are a large luncheon room and excellent lavatories; on the ground floor is a students' reading room, a lecture theatre, the dean's room, and a cloak room. From the vestibule a staircase leads on the first floor to a spacious, lofty, and well-proportioned library, which occupies nearly the entire area of the new buildings. Above this the whole of the upper floor is devoted to a physiological and pathological laboratory and class room; this room is lighted from both sides by wide lofty windows, and is specially constructed and fitted up with a view to microscopical work. The only approach to the school buildings has hitherto been through the hospital and across the garden, but in future the entrance to the school will be in Cleveland-street.

The room hitherto used as a physiological laboratory will now be the Practical Surgery Class Room, and the old library will contain the Materia Medica Museum, and serve as an additional class room.

The whole of these buildings have been erected by Messrs. Holland and Hannen, from designs prepared by Mr. Keith D. Young, architect to the hospital.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5626 births and 3186 deaths were registered during the week ending September 17th. The annual rate of mortality in these towns, which had steadily declined in the preceding five weeks from 23·7 to 18·8, further fell last week to 18·0. During the first eleven weeks of the current quarter the death-rate in these towns averaged 21·1 per 1000, and corresponded with the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 15·0 in Derby, 15·6 in Huddersfield, 15·7 in London, and 16·8 in Bristol. The rates in the other towns ranged upwards to 24·4 in Halifax, 25·8 in Manchester, 26·0 in Salford, and 27·0 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding seven weeks from 1301 to 768, further fell last week to 624; they included 294 from diarrhœa, 116 from scarlet fever, 84 from whooping-cough, 48 from "fever" (principally enteric), 37 from diphtheria, 34 from measles, and 11 from small-pox. These zymotic diseases caused the lowest death-rates last week in Huddersfield and Leicester, and the highest rates in Preston, Salford, and Bolton. The greatest mortality from diarrhœa was recorded in Wolverhampton, Salford, and Bolton; from scarlet fever in London, Salford, Oldham, Bristol, Bolton, Manchester, Birkenhead, and Preston; from measles in Blackburn, and from "fever" in Salford. Of the 37 deaths from diphtheria in the twenty-eight towns, 20 occurred in London, 3 in Manchester, 2 in Brighton, 2 in Portsmouth, 2 in Norwich, 2 in Oldham, and 2 in Leeds. Small-pox caused 9 deaths in Sheffield 1 in Liverpool, and 1 in Cardiff, but not one in Greater London or in any of the twenty-four other large towns. Only 5 cases of small-pox were under treatment on Saturday last in the Metropolitan Asylums Board hospitals receiving cases of this disease; while the number of cases of scarlet fever in these hospitals had increased to 1035. The deaths referred to diseases of the respiratory organs in London, which had been 169 and 160 in the preceding two weeks, further fell last week to 142, and were 42 below the corrected average. The causes of 68, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified, either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Newcastle-upon-Tyne, Portsmouth, and in nine other smaller towns. The largest proportions of uncertified deaths were recorded in Halifax, Sheffield, Oldham, and Liverpool.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·5 and 19·4 per 1000 in the preceding two weeks, declined again to 18·7 in the week ending September 17th; this rate was 0·7 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 12·0 and 13·7 in Aberdeen and Greenock, to 25·2 in Leith and 26·5 in Paisley. The 467 deaths in the eight towns last week showed a decline of 17 from the number in the previous week, and included 55 which were referred to diarrhœa, 19 to whooping-cough, 17 to scarlet fever, 11 to "fever" (typhus, enteric, or simple), 3 to diphtheria, 1 to small-pox, and not one to measles; in all, 106 deaths resulted from these principal zymotic diseases, against 102 and 112 in the preceding two weeks. These 106 deaths were equal to an annual rate of 4·2 per 1000, which exceeded by 0·7 the mean rate from the same diseases last week in the twenty-eight English towns. The fatal cases of diarrhœa, which had been 53, 39, and 45 in the previous three weeks, further rose last week to 55, of which 13 occurred in Glasgow, 10 in Dundee, 10 in Leith, and 9 in Edinburgh. The 19 deaths from whooping-cough showed a marked decline from the numbers in recent weeks, and included 4 in Glasgow, 3 in Edinburgh, 3 in Greenock, and 3 in Leith. The 17 fatal cases of scarlet fever, on the other hand, exceeded the number in the previous week by 6; 6 occurred in Glasgow, 6 in Dundee, and 2 in Edinburgh. The 11 deaths referred to "fever" corresponded with the number in the previous week, and included 5 in Glasgow and 4 in Paisley. Two of the three fatal cases of diphtheria were returned in Dundee; and the death classed to small-pox was said to be a fatal case of chicken-pox in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 73, 71, and 66 in the preceding three weeks, rose last week to 77, and exceeded the number returned in the corresponding week of last year by 12. The causes of 68, or nearly 15 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 37·5 and 27·9 per 1000 in the preceding two weeks, rose again to 34·3 in the week ending September 17th. During the first eleven weeks of the current quarter the death-rate in the city averaged 31·0 per 1000, the mean rate during the same period being but 20·5 in London and 18·4 in Edinburgh. The 232 deaths in Dublin last week showed an increase of 43 upon the number returned in the preceding week; they included 35 which were referred to diarrhœa, 8 to measles, 2 to "fever" (typhus, enteric, or simple), 3 to whooping-cough, 2 to scarlet fever, 2 to diphtheria, and not one to small-pox. Thus the deaths resulting from these principal zymotic diseases, which had been 48, 65, and 77 in the preceding three weeks, declined again last week to 52; they were equal to an annual rate of 7·7 per 1000, the rate from the same diseases being but 3·0 in London and in Edinburgh. The fatal cases of diarrhœa, which had been 30, 31, and 36 in the previous three weeks, were last week 35. The deaths from measles, "fever," and scarlet fever showed a considerable decline from the numbers in recent weeks. The 2 deaths referred to diphtheria were the first recorded in the city since the beginning of August. The deaths of infants considerably exceeded the numbers registered in the previous week. Six inquest cases and 4 deaths from violence were registered; and 75, or nearly one-third, of the deaths occurred in public institutions. The causes of 29, or nearly 13 per cent., of the deaths registered during the week were not certified.

ABERDEEN ROYAL INFIRMARY.—A fresh appeal for subscriptions towards carrying out the scheme of reconstruction or extension of the infirmary has been issued by the House Committee. By the former appeal, for the raising of the sum of £30,000, £24,886 has been realised.

Correspondence.

"Audi alteram partem."

"RAPID DILATATION OF THE CERVIX UTERI."

To the Editors of THE LANCET.

SIRS,—Having read with much interest in THE LANCET of Sept. 10th a paper by Dr. Lewers advocating "rapid dilatation of the cervix uteri," I wish to add my testimony in confirmation of his belief in the safety and advantages of the method, and of its superiority over the older one of dilatation by tents. For many years I have adopted the method, and with increasing frequency and confidence, in cases of uterine hæmorrhage, menorrhagia, and dysmenorrhœa, and more recently, combined with scraping, in cases of erosion of the os and cervix uteri, and have been collecting data for a paper which I hope ere long to publish.

The satisfactory use of rapid dilatation is very much a question of details, and those which I have adopted are very much on the same lines with those described by Dr. Lewers, and are—(1) ether; (2) lithotomy position; (3) fixation of os uteri by two pairs of vulsellum forceps of special form, with short teeth and catch; (4) dilatation by Dr. Matthews Duncan's sounds, followed, if more dilatation be necessary, by Hegar's sounds; (5) thorough application to the uterine cavity of pure melted carbolic acid, due precautions being taken against scalding the vagina; and (6) introduction into the vagina of special iodoform pessaries, which dissolve slowly, instead of melting rapidly, the formula of which was given to me by Dr. Champneys.

I am, Sirs, yours faithfully,

Leeds, Sept. 1887. T. PRIDGIN TEALE.

PAIN AND ITS INTERPRETATION.

To the Editors of THE LANCET.

SIRS,—In response to Mr. Gillies' last letter, I may venture to suggest that the subjects of "pleasure" and "pain" might well be considered together. The two stand out in bold contrast, not only as to the nature of the sensation, but as regards the bodily state which they accompany. For all will agree that, in the main, pleasure signifies health, and pain, disease. The pleasures and pains I am more particularly referring to are those of the grosser kind—such as the pleasures of eating and bodily health, and the pains of physical hurt. Let us suppose the vital changes to be proceeding healthily; myriads of impulses pass up from the skin, viscera, and muscles, and, striking upon the sensorium, yield that vague and ill-defined, but none the less glorious, feeling of well-being. How very little will disturb all this. An undigested meal, the fine sting of a gnat, nay, even "a wandering hair," may soon cast us from our high pinnacle of pleasure, plunging us into an abyss of utter misery.

Now, the natural tendency of pleasure is to cause us to persist in the healthful act which causes it, and of pain to desist from the hurtful cause. The two therefore are strictly utilitarian. The mode in which they effect these good results is interesting. It is partly involuntary and partly voluntary. Concerning the first, Bain's law of self-conservation runs thus: "States of pleasure are concomitant with an increase, and states of pain with an abatement, of some or all of the vital functions." A pleasurable feeling therefore tends, by a hurrying on of the vital processes, to a continuance of the act which causes it, as when a child sucking at the breast is led by the relish of the milk to apply itself with increased vigour to the securing of it; while, on the other hand, a painful feeling, by depressing the vital processes, leads to a discontinuance of the pain-producing act, such as the chewing of an unpalatable food. In such cases pleasure and pain work out the desired result more or less automatically. As the will grows, however, the pursuit of pleasure and the avoidance of pain become more and more a matter of volition. But it is not only the grosser organic pains which urge us to action; there are pleasures and pains of a far more refined order—such as the pleasures of fine art, poetry, affection, learning; and the pains of anger, disappointment, dread or remorse. Thus, there are two opposing series of mental forces—the one urging us *to do*, the other bidding us *not do*. It is, in fact, these pleasures and pains, either actual or remembered, which constitute our motives to action. How far *they* manage *us*, or *we them* is a matter of speculation, but I imagine they have it a good deal their own way.

I say pain and pleasure are utilitarian, for the one leads to the avoidance of harm and the other to the pursuit of good. What should we do without them? If pain did not attend evil, we should for ever be rushing into destruction; and did pleasure not accompany good, we should never seek after it, unless indirectly by the avoidance of harm. Let us, for instance, assume an individual incapable alike of the pangs of hunger and the delights of eating—would he not be rather apt to neglect this very necessary process? In short, without the capacity for pleasure and pain there would be no impulse to action one way or the other. Hence, the two have been necessary factors in the evolution of mind. The existence of an intellectual being having no capacity for pleasure and pain is conceivable, but the evolution of such a being quite inconceivable. Possibly a higher complex reflex organism might evolve, but one endowed with intellect *never*. Indeed, as regards the existence of such reflex organisms, I have never been able to shake off the lingering belief that many of the invertebrates are devoid of even the crudest sensation. Although the facts, therefore, plainly prove that pleasure and pain have both a tremendous purpose, yet a writer in your columns gravely affirms of one of them that it is purposeless.

Concerning the evolution of pleasure and pain, how has it so happily come about that pleasure attends healthful action and pain the reverse? Let us assume the existence of a crude sense in a lowly organism. At this early stage there is no differentiation into a sense of pleasure and pain, the mental world being, as Spencer might say, *homogeneous*: but soon the homogeneous passes into the heterogeneous—there is a dim discernment of pleasure and pain—for I imagine this differentiation must have occurred before the differentiation into the special senses. Now I see no reason why pleasure should have originated on the side of health, and pain on that of disease. It might, for aught we know, have been the reverse. Be this as it may, the principle of natural selection would very soon couple health with pleasure and a disturbance of it with pain, seeing that the opposite state of things would lead to extinction. Undoubtedly pleasures have thus grown. Take a single instance—the pleasures of love,—and see how marvellously they are adapted to the propagation of the race. It is manifest that natural selection has secured this, but is this process the sole factor in the evolution of pleasure and pain? Herbert Spencer, in the second volume of his Biology, points out that natural selection cannot account for a large part of organic evolution; for instance, the æsthetic sense cannot have developed thus. It has grown by cultivation through many generations—that is, by *use*; and, indeed, Darwin, in his later editions, acknowledged that he had not attributed sufficient importance to the "use and disuse of parts." There can be little doubt that not only the æsthetic pleasure, but pleasure in general has thus been very largely added to. The capacity for pain, however, cannot well be strengthened by *cultivation*; but I think we may lay it down as a rule, be the explanation what it may, that individuals who have the greatest capacity for pleasure—I ought perhaps to say the higher pleasures, such as the pleasures of poetry or music—are, at the same time, most sensitive to pain. Certainly, different individuals feel pain in different degrees, and this raises the interesting question: Have we any right to say that some can bear pain better than others, for how do we know that the seemingly better toleration of the pain may not be due to a lesser feeling of it? When pain attains a certain pitch, I imagine that it is unbearable for anyone and everyone. If a man by great force of will brings himself to bear what would be to others unbearable, is it not rather because by his very effort the pain is diminished? We have no right to say that the Fakir, who plunges a hook into his flesh and thereby suspends himself to the branch of a tree while a fire burns beneath, can bear pain better than others. I have heard a man solemnly avow that he derived the keenest pleasure from the operation of the dentist, such as the scraping and filing of teeth. If one did not know this little weakness of his,

one might fancy that he displayed the most heroic courage by the calmness of his demeanour while under the dentist's hands.

One word more. I have said that pleasure and pain are utilitarian; but just as pain has its imperfections, so has pleasure, but of these I will say nothing.

I am, Sirs, yours faithfully,

Guilford-street, Sept. 19th, 1887. HARRY CAMPBELL, M.D.

To the Editors of THE LANCET.

SIRS,—As a firm believer in the theory of evolution, I am not likely to dispute the main propositions of Drs. Collins and Campbell in recent numbers of THE LANCET. Still, it appears to me that some aspects of the problem of pain which are worthy of attention have been forgotten in the discussion. Pain, like all disease, may be regarded as a consequence of a failure of correspondence with the conditions of life. Whether the balance is restored by changes in the conditions or in the organism itself depends on many circumstances, and need not now be discussed. All early symptoms are in a sense warnings against later morbid states due to the same causes; and in many cases pain acts as a very effective warning. Where it occurs too late to warn the individual it still has a powerful influence for good upon the community. The web of modern civilisation is becoming so complex that the misfortune of one is more and more the concern of all, and society, as a whole, has to bear many of the penalties of individual blundering or transgression. This tends to increase the sympathy of the whole for the sufferers, and in a community where intelligence is increasing provides a powerful motive for the investigation of disease. Many diseases are due to conditions only removable by united action, and it is therefore a distinct advantage to widen the basis of retribution. Probably far less attention would have been paid to the physiology of parturition had the process been a painless one, although in this instance there are several other reasons for believing the pain to be useful. It is the painfulness quite as much as the fatal nature of cancer and hydrophobia which has excited attention and brought us to the threshold of new methods of treatment—at all events as respects one of these dread scourges of humanity. In conclusion, it appears to me that pain must be regarded as only one of many evidences that there is something amiss—something to be rectified; and, looked at in this light, it will seldom fail to be indirectly useful. Of the purely moral benefits of pain I will say nothing, but merely add that if pain be supposed to sweeten the character, so will its relief.

I am, Sirs, yours faithfully,

F. RUFENACHT WALTERS, M.D. Lond.

Finsbury-circus, Sept. 17th, 1887.

To the Editors of THE LANCET.

SIRS,—Will you allow me to make a few remarks—the last as far as I am concerned—on the subject of pain and its interpretation?

I think the bulk of your readers will agree with me that Mr. Gillies has failed to make any converts to his creed. At any rate, he has fought his battle single-handed, for no champion—unless we except Dr. Hayman—has come forward in support of his views. Mr. Gillies, without denying the truths of evolution, "is of the same opinion still." What he cannot accept is that "pain stands out simply as an evidence of evolution." What *we* cannot accept is that "pain has some other and higher purpose than that." This is very much the position from which we started! Mr. Gillies says: "It is with the meaning, the motive of pain, that I am concerned, not with the process of its evolution." Surely the one should be dependent on the other. We do not admit any special meaning or motive. We see in pain the expression of a high degree of sensibility in the nervous system; and we believe the nervous system has attained its present high degree of sensibility by reason of long and steady development—evolution, in fact. But Mr. Gillies will not concern himself with evolution. He is content to take pain as he finds it, where evolution has brought it, and seek a *motive* in it without considering the nature of its existence—its *raison d'être*—at all. Is it not manifestly unlikely, to say the least, that a nervous system sufficiently developed to receive and convey a high measure of pleasurable sensation should be incapable, under other conditions, of also receiving and conveying an equally high measure of *all* sensations, pleasurable or otherwise? "Sauce for goose is sauce for gander." I can thus see a reason for the existence of pain, but no motive or purpose.

I am, Sirs, yours truly,

A. ST. CLAIR BUXTON, F.R.C.S.

Orchard-street, Portman-square, W., Sept. 20th, 1887.

PROTECTIVE POWER OF VACCINATION.

To the Editors of THE LANCET.

SIRS,—In your number of the 10th inst., Dr. Wm. Squire says that the experience of our late epidemics of small-pox suffices to upset the theories that vaccination performed within four days of the infection of small-pox would be in time to prevent the development of the latter, and that if vaccination could proceed to the stage of areola it would be in time. Marson stated it as his opinion, founded I presume on experience, however it was to be accounted for, that, "suppose an unvaccinated person to inhale the germ of variola on Monday, if he be vaccinated as late as the following Wednesday the vaccination will be in time to prevent small-pox being developed; if it be put off until Thursday, the small-pox will appear, but it will be modified; if the vaccination be delayed until Friday, it will be of no use, it will not have had time to reach the stage of areola, the index of safety, before the illness of small-pox begins." Again, so late as July 3rd, 1886, we read in THE LANCET: "A Russian medical student (M. Gubert), by repeating the vaccination on three successive days, was able to produce matured vesicles in four or five days. This rapid saturation of the organism with the vaccine virus enabled M. Gubert to arrest the development of the disease in twenty-seven persons in whom, he states, he was quite certain that the small-pox was incubating, while in twelve others the disease was so modified as to be considered only varioloid. All the experiments were carried out with calf lymph." May I ask, Where is the record of the experience to which Dr. Squire refers to be found?

I am, Sirs, yours faithfully,

HUGH THOMSON, M.D.

Lansdowne-crescent, Glasgow, Sept. 19th, 1887.

SCARLATINA OR SCARLET FEVER.

To the Editors of THE LANCET.

SIRS,—A very widely spread belief in the minds of the working classes that scarlatina allows of the above classification is, I feel convinced, a powerful factor in the spread of this dangerous disease. Few who have treated the affection amongst the class I refer to have failed to observe the effect produced by the word chosen. If without thought the medical man pronounces the patient to have "scarlatina," a contented and relieved expression of countenance is at once observed, and is, in almost nine cases out of ten, followed by the remark, "I was afraid it was 'the fever,'" meaning scarlet fever. If the latter word is used a very different effect is produced. The full danger appears to be realised, but the diagnosis is doubted if the patient does not appear very ill. I feel sure that much harm results from this state of ignorance amongst the majority, and does much to render useless the efforts made to check this disease during an outbreak. "Scarlatina" is looked on as so trivial an affection that precautions of all kinds are too often ignored. Children are apt to be sent to school, allowed to mix with their brothers and sisters, and others permitted to frequent the infected houses. It is simply useless for the individual medical man to try to explain that there is no difference between scarlatina and scarlet fever. I believe, however, that much good may be obtained if this fact were stated on the notices posted throughout the districts inhabited by the class who entertain the dangerous views I describe.

I am, Sirs, yours faithfully,

Battersea Park, Sept. 19th, 1887. W. CARY JEFFRIES.

AT an inquest held last week at Bedworth, North Warwickshire, on the body of Charles Herbert Ford, L.R.C.S.I., who died after taking three drachms of a solution of morphia, representing eighteen grains of the drug, the jury found that the deceased destroyed himself while of unsound mind.

LIVERPOOL.

(From our own Correspondent.)

THE GYMNASIUM.

THE importance of due attention being paid to physical development in children of both sexes, as well as in young men and women in whom it has been previously neglected, is now generally admitted. It follows, therefore, that one or more well-organised gymnasia are becoming necessary features in every large community. Liverpool has long recognised this fact. More than thirty years ago the late M. Hugenin had his gymnasium near the Exchange, conveniently situated for men of business who could slip away from desk and counter for a half-hour's gymnastics, the value of which to men whose daily avocations involved stooping over desks and confinement in close offices could not be over-estimated. Later on this old gymnasium was found quite inadequate to meet the accommodation required, and by the energy of the late Mr. Hulley, aided by numerous influential friends, the present gymnasium was erected. It is now under the superintendence of Mr. Alexander, under whose able management it has been very successful. He has recently published a small work entitled "Modern Gymnastic Exercises (Elementary)," which will be found well worthy of perusal. As he truly observes in it, "Making poor stunted forms strong healthy physiques, discontented men bright and happy beings, is good service indeed." The most valuable exercises of all are the classes of dumb-bells, Indian clubs, and bar-bells, with musical accompaniments. These bring into play all the muscles of the body, and change puny delicate lads into strong active young men.

WORK DONE BY THE SCAVENGING STAFF.

Some idea of the enormous work thrown upon the local scavenging staff may be judged by the following details. In an average year 7000 middens and a quarter of a million dry ashpits are emptied. Nearly 18,000 loads of refuse collected by citizens, and more than 100,000 loads of refuse swept up by the scavengers from the streets, courts, and passages of the city, are removed by "bell-cart."

EMPTYING ASHPITS AND DIARRHŒA.

Although in Liverpool, as in other large cities, modern progress has changed most of the old "privies" into water-closets, dry ashpits are still required for the purposes of receiving animal or vegetable refuse. There is no doubt that burning is the best mode of disposing of the latter, but unfortunately the average kitchen ranges, both ancient and modern, are not constructed with this view. It becomes necessary, therefore, that these dry ashpits containing vegetable refuse should be emptied at reasonably frequent intervals, the alternative meaning an obvious source of danger in the proximity to any dwelling of any decaying animal or vegetable matter. At the same time, frequent removal in hot weather is to be deprecated, especially if there be reason to believe that this is a cause of diarrhœa as has been suggested. The subject is under consideration.

NARROW ESCAPE OF FIREMEN.

The superintendent of the local fire brigade, with one inspector and four firemen, had a narrow escape at a fire which occurred on board the steamer *Scholer*, while in one of the docks. When the men descended into the fore-peak of the steamer, where it was believed the fire existed, they were at once overcome by noxious gases or chemical fumes, supposed to be caused by the combustion of some portion of the cargo, which consisted of cotton and other goods. They were hauled up in an unconscious condition, but speedily recovered by proper treatment, except one fireman, who had to be removed to the Royal Southern Hospital, where he soon recovered. Superintendent McWilliam, who has had many years' experience of fires, and is accustomed to the densest smoke, stated that he had never experienced anything so peculiarly overpowering on any previous occasion.

DEATHS FROM HYDROPHOBIA.

An inquest has been held by the borough coroner on the body of a boy eight years of age, who died on the 17th inst. in the Royal Infirmary from hydrophobia. The case was seen by Drs. Glynn and Davidson as well as Dr. Hugh R. Jones, the house physician, who gave evidence at the inquest. It appears from the evidence that the boy was bitten on July 30th by a dog at the back of the house occupied by the deceased's father. The dog was a sheep dog, and the boy's hand was bitten through. His mother stated that it bled profusely, and that she took him at once to a surgeon, who dressed the hand. The boy apparently recovered from the injury, but on the 13th inst., while walking with his father, he complained of pain in the affected hand, and that it went right up his arm. As he became delirious that evening, a doctor was called, and he was taken to the Royal Infirmary, where he remained till his death. All the symptoms of hydrophobia were well marked, and the post-mortem examination confirmed this. The same dog bit a lady, a Mrs. Atkinson, who most courageously went to the rescue of the boy; she has undergone the Pasteur treatment, and so far successfully.

A second victim to the same dog above alluded to has just died. This was a boy nine years old, the son of a widow residing in Wavertree, a township distant three miles from Liverpool. This boy was bitten on July 30th in the calf of the left leg, five distinct marks being subsequently found. He was at once taken to a chemist's, where the wounds were cauterised, the bites healing very rapidly. On the 17th inst. he first complained of feeling unwell, wished to lie in bed, and refused liquids. On the next day (Sunday) he was much worse, and on Monday Dr. Wearing of Wavertree was called in. The little fellow became delirious, and in the afternoon of the 20th he died. A large number of wandering dogs are annually seized by the police, and if not claimed or sold are destroyed, but, in spite of this, there are still many loose dogs in the streets.

Liverpool, Sept. 21st.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

HEALTH OF SUNDERLAND.

MR. A. E. HARRIS, the medical officer for the borough, has issued his report on the Sanitary Condition of Sunderland for 1886. The document is a long one, too much so to analyse in these notes; but upon the whole it is most interesting and instructive, as showing the result of vigorous sanitary measures upon the health of the people of Sunderland; indeed it is not too much to say that since THE LANCET's report in 1884 a sanitary revolution has been effected in the Wearside borough. The death-rate for 1886 was 19·4 per 1000, the nearest approach to which was 20·8 in 1880. The average death-rate for the previous ten years was 23·5. The decreased mortality, Mr. Harris shows, is not confined to any one group of ages, but is general to all groups except one—viz., those between fifteen and twenty-five years of age. The greatest decrease occurs among children under five years of age, of which there is a falling off of 390 deaths. Mr. Harris very clearly and forcibly shows that the age distribution of Sunderland tends to a low mortality. Its configuration is favourable, its water supply unexcelled, its sewerage system good, and finally, he says, the Health Committee have done and are still anxious to do all in their power to promote the health of the borough, so that, as a result, the decline in miasmatic or "filth" diseases is the most noticeable and most gratifying feature in Mr. Harris's returns. With regard to the care exercised as to food inspection, he mentions that no less than 77,000 herrings were seized as unsound. He is, however, far from being fully satisfied, but looks forwards to a reduction of the annual death-rate to about 16 per 1000, which he thinks should be about the normal figures. Be this as it may, he is to be congratulated on the success achieved so far under circumstances which might have led a less resolute medical officer of health to despair.

DRUNK OR DYING.

An unfortunate mistake occurred at Middlesborough last week, when an elderly and well-dressed female became insensible in a tram-car. The conductor removed her and set her on a door step, from which she was afterwards removed in a barrow to the police station. Dr. Longbotham, on seeing her, very properly ordered her removal to the workhouse, where she remained unconscious for a few hours, and died.

SCARLET FEVER IN NEWCASTLE.

The return of infectious diseases notified by practitioners in Newcastle to the medical officer of health during the fortnight ending Sept. 10th shows the unusually large total of 116 cases. No district appears to be free, but it is worst at the extremes of the city east and west. Enteric fever is also shown to be rife. The heavy rains which have set in here since the commencement of September have caused a marked fall in the previously high temperature.

TYNEMOUTH WATER SUPPLY.

Many will be pleased to see that the Town Council of Tynemouth are about to take steps to bring a supply of proper drinking water to the place. The defective quality of the water at Tynemouth has been the means of preventing this favourite health resort from receiving anything like the number of visitors who would otherwise gladly go there, for the convenience of Tynemouth to our great northern towns and its natural attractiveness give it a position not easily surpassed.

A DACOIT'S HAIR.

One of the Royal Welsh Fusiliers, who returned to Newcastle the other day from Burmah, where he has been engaged with the Dacoits, has brought home a curiosity in the shape of the long hair cut from one of the robbers who was shot on the river Moo. It is jet black, and its extreme length is sixty-seven inches.

Newcastle-on-Tyne, Sept. 21st.

EDINBURGH.

(From our Correspondent.)

POST-GRADUATE COURSES.

THE second session of Post-Graduate Lectures will commence on Monday, Sept. 26th, and will be continued for three weeks. Since the inauguration of these lectures last year, there has been a considerable development both in the subjects included and in the amount of instruction to be given in the various branches. The unexpected success with which last year's effort was attended has encouraged the committee to make much more extensive preparation for the present season. Every branch of medical education is to be represented. In Dental Diseases, six demonstrations showing most recent advances in the practice of dentistry have been arranged by the lecturers of the Edinburgh Dental School. Diseases of Children are to be treated in four clinical demonstrations at the Sick Children's Hospital by the physicians to that institution. Obstetrics and Gynæcology are to be treated by Professor Simpson, Drs. Croom, Hart, and Barbour in a series of daily demonstrations at the Royal Infirmary. The Throat and Ear are to be dealt with by Dr. Duncanson, Dr. McBride, and Dr. Mackenzie Johnston, in a series of special lectures and clinical demonstrations. Dr. Argyll Robertson, Mr. Berry, and Mr. George Mackay will hold courses of clinical instruction in Eye Diseases. Dermatology and Syphilis are to be treated by Dr. Allan Jamieson and Dr. MacGillivray respectively, both theoretically and clinically. At the Royal Infirmary, the medical out-patient department is to be largely put into requisition, the assistant physicians, Drs. Smart, James, and Byrom Bramwell, having each a special series of clinical demonstrations, in addition to lectures on important points in practical medicine. General Medical Diseases have eight lectures allotted to them. These will be delivered in the infirmary by the physicians and the University Professors of Clinical Medicine, and they will be illustrated by clinical cases at present in the hospital. In the Surgical department a similar course of five lectures on General Surgical Diseases will be conducted by the surgeons to the infirmary and the University Professors of Surgery and Clinical Surgery. Mr. Cathcart, assistant surgeon to the infirmary, is to contribute a course of demonstrations on Artificial Limbs and on the taking of casts. In Pathology an extensive course of instruction in Practical Bacteriology is arranged under the charge of Drs. Woodhead and Edington. Mr. Bruce will give seven demonstrations on the Pathology of the Brain and Spinal Cord, and Mr. Macdonald Brown two demonstrations on Bone in its relations to Disease. Mental Diseases are to be dealt with by Drs. Clouston and Batty Tuke; and Medical Police by Dr. Littlejohn, medical officer of health for the City of Edinburgh. Regional Anatomy is to be extensively dealt with by Drs. Symington and Macdonald Brown, whose courses of demonstrations will cover all the more important regions of the body. Dr. Murdoch Brown will demonstrate microscopically the Parasites of Man and Urinary Deposits. Dr. Craig is to give a series of lectures on New Remedies and Dr. Felkin on Climatology. Vaccination will be taught clinically by Drs. Husband and Buist. For those attending the course, each day will be very fully occupied if they attempt to avail themselves of even a part of the curriculum; it is now sufficiently expanded to allow of a considerable amount of specialisation on their part, since each subject is in itself dealt with in a variety of ways, and so extensively as to convey an advanced knowledge of its present aspect. Tickets for the whole course can be obtained at a cost of two guineas from either of the secretaries, Dr. Claud Muirhead and Professor Chiene, Charlotte-square, Edinburgh.

Edinburgh, Sept. 20th.

DUBLIN.

(From our own Correspondent.)

QUEEN'S COLLEGE, GALWAY.

THE President, in his report for the past session, states that he feels satisfaction in the reflection that the College can justly claim to have given an impulse to educational progress throughout the country, and more especially to have conferred substantial benefits on the youth of a remote and outlying province. The change in the position and relations of the Queen's Colleges has in nowise affected the duties and the tasks of the teaching body of the College. While the collegiate discipline of lectures and instruction in common is not relaxed, the College has recognised facts as it has found them, and has adapted its curriculum to meet the rules and requirements of the Royal University of Ireland. And it may be hoped, the President adds, that the thoroughness of the intellectual training which the collegiate system ensures will exhibit results that will ultimately secure for it even higher appreciation, and enable it to keep pace with the growing educational demands of the country and the time. The students in attendance during the session 1886-87 numbered 103, of whom 45 were in the Faculty of Medicine, the total showing an increase of nine as compared with the previous return. The library and museums are in a satisfactory condition, while large additions have been made to the Natural History Museum, which is now in a perfect state of efficiency for teaching purposes. The apparatus for the illustration of the principles of natural philosophy, and the collections specially devoted to the studies of the medical profession, are worthy of particular notice. The rapid development of medical science, especially in the biological department, demands constant enlargement and improvement of the scientific apparatus necessary for the purposes of instruction; and it is satisfactory to learn that the provisions for the study of practical physiology and histology are commensurate with the growth and importance of these sciences.

ROYAL UNIVERSITY OF IRELAND.

Dr. Knight, Lecturer on the Practice of Medicine in the Ledwich School of Medicine, will be a candidate for a Fellowship in the department of Medicine, the election for which by the Senate will take place next month. On the same occasion Mr. C. H. Robinson, also connected with the Ledwich School, will be a candidate for an examinership in Materia Medica. In mentioning these candidatures, it may be noted as remarkable that the Ledwich School (which has about the same number of students enrolled on its book as the University of Dublin) is the only medical institution in Ireland which has not a single teacher connected with the Royal University, either as a senator, fellow, or examiner. On the other hand, Trinity College has sixteen senators, four fellows, and two examiners; and the Catholic University three senators, ten fellows, and six examiners. The Senate will, at the end of October, elect a curator, to take care of all the University collection, museum, laboratories, &c., and who shall also be

competent to act as an examiner in some one of the experimental or natural sciences. Candidates must apply to the secretaries of the University on or before Oct. 1st.

THE EPIDEMIC OF MEASLES IN DUBLIN.

The measles epidemic, which has been prevalent in Dublin for some months, shows little signs of abatement, and up to the present the deaths have been numerous. For example, taking the thirteen weeks ending Sept. 10th, I learn that 299 persons succumbed to the disease; and as the epidemic exists in various parts of the country, the total mortality must be considerable.

BOYLE UNION.

The Boyle Guardians, in a sudden fit of economy, recently determined to give notice to their apothecary to resign, intending that their medical officers should compound the necessary medicines, thereby saving the salary of the apothecary. However, the guardians, when they came to ask the medical staff, met with a distinct refusal, as they very naturally declined to undertake additional duties which they had not contracted to perform. In this dilemma the guardians sought the aid of the Local Government Board, and requested them to sanction the proposed abolition of the office of apothecary to the workhouse and of Boyle dispensary district, in consequence of the state of the union finances, and because some adjoining unions did not possess an apothecary. The Board, however, refused on these insufficient grounds, and Dr. Todd, their inspector (to whom they referred the matter), was of opinion that it would be contrary to the interests of the sick poor to carry out the proposal. A notice of motion has been given that the clerk should again write to the medical officers, and that, should they refuse to compound medicines, they be requested to resign, and that a new election be held to fill the vacancies. The medical staff would, of course, be very foolish to adopt such a suggestion; they ought to be perfectly aware that the guardians, dare not remove them more especially as the sanction of the Local Government Board to the removal of the office of apothecary to the workhouse and dispensary district has been withheld.

Conjoint examinations for the diplomas of the Royal College of Surgeons in Ireland and the Apothecaries' Hall of Ireland will be held at the end of October or beginning of November.

Dr. Laurence Kerrigan has been elected coroner for the county of Westmeath without opposition.

Dublin, Sept. 20th.

PARIS.

(From a Correspondent.)

THE SWEATING SICKNESS.

IN the course of a long report, read at a recent meeting of the Academy of Medicine, upon the recent epidemic of sweating sickness in the central departments of France, Dr. Brouardel stated that he had made a diagnosis of the epidemic, which would prevent it being mistaken for measles in future, the eruption on the skin being much more rapid, appearing upon the second day after the premonitory symptoms have set in, while when the patient is recovering the peeling of the skin is very much more like that attending scarlet fever. Moreover, the children, who are more subject to it than grown persons, perspire very profusely, and appear to be suffering from intense oppression on the chest. There is, however, much in common between the two complaints, as the parents of children who have had measles have themselves afterwards been seized with the sweating sickness. Dr. Brouardel explains that for some reason or other the neighbourhood of Poitiers has always been very subject to it. This year it has been particularly severe, for out of 13,000 inhabitants in the district of Montmorellon 1700 were attacked, and the average rate of mortality was 12 per cent., though in some villages it reached as much as 33 per cent. Curiously enough, while in some villages twenty children were attacked to one adult, in other places more adults than children were seized with the disease. It is evidently contagious, for upon one farm fourteen people out of nineteen were seized, but there is no evidence to show that it is propagated by the water or any other liquid. It is communicated like measles or scarlatina, and the period of incubation never exceeds twenty-four hours. Dr. Brouardel, in order to check the propagation of the disease, organised, with the assistance of the house surgeons in some of the Paris hospitals, a special medical service for disinfecting the clothes and cottages in the district, the chief feature in which was the formation of a relief convoy, comprising a hand engine and apparatus for steaming clothes, bedding, &c. The epidemic has now quite disappeared.

TYPHOID FEVER IN PARIS.

There is another typhoid epidemic in Paris, due, it is alleged, to the substitution, during the recent long spell of hot dry weather, of the Seine for spring water in many quarters of Paris. On Sept. 1st there were 353 typhoid-stricken patients in the hospitals. There are now 509. The number of those who are treated in their homes is said to be very great.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon-Major John Stannard McAdam, to be Brigade Surgeon, vice A. S. K. Prescott, retired (dated July 26th, 1887).

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon Robert George Bird has been placed on the retired list of his rank (dated Sept. 9th, 1887).

ARTILLERY VOLUNTEER CORPS.—2nd Volunteer (Dorsetshire) Brigade, Southern Division, Royal Artillery: Acting Surgeon P. W. G. Nunn resigns his appointment (dated Sept. 17th, 1887).

RIFLE VOLUNTEER CORPS.—1st Clackmannan and Kinross: Acting Surgeon P. Rough, M.B., resigns his appointment (dated Sept. 17th, 1887).—1st Volunteer Battalion, the Northumberland Fusiliers: Lieutenant J. P. Elliot to be appointed Acting Surgeon (dated Sept. 17th, 1887).—1st Volunteer Battalion, the Prince of Wales's (North Staffordshire Regiment): Charles Henry Phillips, Gent., to be Acting Surgeon (dated Sept. 17th, 1887).

Obituary.

WILLIAM BLOWER, M.R.C.S., L.S.A.

THE late William Blower was born at Yardley-Hastings, Northamptonshire, on Oct. 19th, 1802. His marked abilities and love of study led his parents to choose for him the profession of medicine, and to this end he was placed with the late Mr. Aspray, of Olney, Bucks. In due time he went to London, and studied at Guy's, Webb-street, and St. Thomas's. He took his L.S.A. in 1824; and two years later, an opening presenting itself at Bedford, he settled there in practice at the age of twenty-four. After thirty years of laborious practice, with constantly increasing engagements, when fast rising in public estimation and becoming a consultant in difficult cases, especially of diseases of women, his tall and noble form was suddenly laid low with paraplegia, which in three days became complete, and, in spite of all that skill could do, the paralysis continued unrelieved. Although thus permanently confined to his couch, removed from all active life, and at times suffering much from severe attacks of pain and depression, his active and well-stored mind, aided by an exceptional memory, found abundant occupation in study, reading, and writing. His seclusion was relieved by the visits of his old friends and several former pupils, who much enjoyed a chat with him, and to hear his mature experience on scientific, medical, and other subjects. For many months his friends had noticed a gradual failure of strength, but he continued to rally from slight ailments until Thursday, the 25th ult., when attacks of lancinating pains, with restless nights and signs of failure of the heart's action, excited fears, but too soon realised, that life was ebbing out; and the heart gently ceased to beat on Aug. 30th. His faculties remained unclouded to the last. The illness just exceeded twenty-eight years. He was

within two months of completing his eighty-fifth year. He married rather late in life, and leaves a widow, but no children.

In sanitary matters Mr. Blower took a deep interest, and the subject of epidemics was his constant study. His experiences of the cholera epidemics in Bedford in 1832 and 1849, and of several severe outbreaks of continued fever in the town and neighbourhood, furnished him with a wealth of illustration now happily wanting to many others equally busily engaged in practice. He contributed valuable papers on these and other subjects to the medical journals, chiefly during his illness, when he occasionally wrote in the local papers on matters of public interest, sometimes anonymously. He took a prominent part in local politics, was a member of the corporation and of the Harpur Charity Board, and in 1853 was elected mayor. The Literary and Scientific Institution and General Library had in him one of its little band of founders. His fondness for natural history, and especially botany, incited the same love in others, and had no little to do with the formation of the Beds Natural History Society, to which during his illness he communicated some interesting papers. He was an earnest and critical Biblical student, reserved in his bearing; but those who knew him intimately recognised the sincerity of his Christian faith, so exemplified by the unmurmuring fortitude with which he bore an unusually protracted and trying affliction. He was firm in his convictions, had strong insight, a genial manner, and a disposition very unselfish and self-sacrificing. He was ever a most kind and sympathising friend to the poor, who shared equally with others his helping hand. All who knew him deeply mourn the loss of a true and valued friend.

DR. F. RICCO.

THIS eminent Neapolitan physician and alienist died on the 2nd inst., in circumstances peculiarly distressing. For the last few weeks he had been relieving his onerous duties in Naples as director of the Ospedale della Pace by running down by train to Salerno, whence, after the reinvigorating sea bath, he returned in the evening to town. He had entered the last up train shortly after 5 P.M. seemingly in good health and spirits, but at the next station after Salerno he was found by the guard dead in a first-class carriage. Every care procurable in the little town of Cava dei Tirreni (the station in question) was bestowed on him, but death, presumably from heart failure, had supervened long before he had got so far on his home journey. He was carried to the Mater Domini Hospital in Naples, whence, on the 4th, he was followed to the grave by a long train of mourners, including the Duke di San Donato, all the Neapolitan deputies and civic dignitaries then in the city, the leading medical men (professors and practitioners), and many working-men's societies, each with its special banner.

Federico Ricco, in addition to his work as director of the Ospedale della Pace, in which, it may be mentioned, he established a *clinica pædiatrica*, had also laboured much and effectively in the institution of the great inter-provincial lunatic asylum at Nocera. He had also conceived the project of erecting a special asylum for criminal lunatics, a *manicomio-carcere*; but its realisation, though actively favoured by many distinguished names in penal legislation, he had to postpone.

He was a frequent and able contributor to the literature of the profession, especially to the clinical side of medico-psychology, and the fame he thus acquired led to his admission as honorary fellow into many societies in Italy and abroad. His courtesy and his intelligence will long be gratefully remembered by all who had the privilege of accompanying him over the hospitals under his care.

He is survived by his wife, the only sister of Signor Nicotera, Minister of the Interior in the first Depretis Cabinet.

PAOLO MACCHIAVELLI.

ONE by one the physicians and surgeons whose distinction has been earned in the campaigns fought out for Italian unity are passing away. The last to swell "the majority" is the Commendatore Paolo Macchiavelli, who, in the medico-military parlance of Italy, filled the post of major-general on the army medical staff.

He was born at Sarzana, on the Riviera Ponente, on Dec. 9th, 1825. Trained for the medical profession, the revolution of 1848 found him, with many other ardent youths, eager to join its ranks; and so in that year he served as quarter-master in the column of Genoese volunteers formed under the Provisional Government of Lombardy. In 1859, the war of independence, in which King Victor Emanuel, allied with the Emperor Napoleon, took the field against Austria, drew him once more into active campaigning, and he became surgeon to the regiment of *cacciatori* (chasseurs) in the army of the Emilia. Next year he entered the Royal service as *medico divisionale* (surgeon of division), from which position he was promoted through all the successive stages, till, on November 30th last, he was appointed major-general on the medical staff, and on the same day president of the Commission of Military Hygiene.

For his services in the campaigns of 1848, 1859, and 1866, he was honourably mentioned, not only as a medical officer, but as a combatant under fire—services which, among other distinctions, procured him the orders of the Crown of Italy and of the Saints Maurice and Lazarus. "He was," says a professional compatriot, "a man of high culture and of unswerving probity; austere, indeed, but scrupulously just. He had made himself proficient in many departments of medicine; while in surgery, his special field, he possessed singular skill as an operator. Military hygiene was his favourite study, and he had earned in it a reputation which extended far beyond the Italian frontier.

His death was sudden. Passing through Genoa on his way to headquarters in Rome, he went on the 12th inst. to the public baths in the Piazza Cavour, and there, at noon, he was seized with cerebral hæmorrhage, and never afterwards regained consciousness. He leaves a widow and daughter to mourn an exemplary husband and father.

Medical News.

SOCIETY OF APOTHECARIES.—The results of the examination in Arts qualifying for registration as medical student, held in the hall of the Society on the 2nd and 3rd inst., have just been published. There were 181 candidates, and from the pass list it appears that thirty-six were placed in the second class, and eighty-two were certified as having passed in some subjects, but not in all. The next examination will be held on the 2nd and 3rd of December.

AT an estimated cost of £2723, the Bradford Town Council has decided to make additions to its fever hospital.

GREAT NORTHERN CENTRAL HOSPITAL.—An amateur theatrical performance for the benefit of the funds of the above charity was held on the lawn of Fairseat, Sir Sydney Waterlow's house at Highgate, on Saturday last.

THE GRESHAM LECTURES ON PHYSIC.—Dr. Symes Thompson commences his annual lectures at Gresham College on October 4th, and the course will be continued on the three following days.

GLASGOW ROYAL AND WESTERN INFIRMARIES.—For the benefit of these infirmaries a sum of £170 10*s.* was realised by the gate money drawn at the Children's Jubilee Fête held on Glasgow Green on the 10th inst. To this amount a sum of £30 was added by Mr. Walter Wilson, promoter of the entertainment—£100 5*s.* being thus received by each of the two institutions.

DONATIONS TO MEDICAL CHARITIES.—Mrs. Adcock of Erdington has given £1250 to be devoted to the maintenance, in the Jaffray Suburban Hospital, Birmingham, of a bed in memory of her husband and of her brother.—In addition to the contribution to the funds of the Ayr County Hospital by the Earl of Stair mentioned in our last, the sum of £1389 towards the same object has been collected by the Hon. Mrs. Vernon.

VOLUNTEER MEDICAL STAFF CORPS IN EDINBURGH.—During the last few months members of the St. Andrew's Ambulance Association have been drilling weekly in the Edinburgh Corn Exchange with the object of forming a lay company of the Volunteer Medical Staff Corps. At a recent meeting it was resolved to memorialise the Government to obtain the necessary official sanction, and to bring the matter under the notice of the Secretary of State for Scotland, the Lord Advocate, and the members of Parliament for the city.

DROWNING OF A SHIP'S SURGEON.—On the 11th inst. a body, identified at the subsequent inquest as that of Mr. James Oakley, L.R.C.S.I., was washed ashore at Millom. The deceased was surgeon to the mail steamer *Calabar*, sailing between Liverpool and Cape Coast Castle. The circumstances attending the casualty seem obscure, as the vessel appears not to have been wrecked. The coroner's jury returned the verdict of "Found drowned."

DENTISTRY IN GLASGOW.—The dental students of Glasgow have met to protest against the amount of unqualified dental practice being carried on in the city. A petition was drawn up appealing to the West of Scotland branch of the British Dental Association for protection against men who, without right or title, are practising dentistry, to the detriment of those who have spent both time and money to qualify themselves for the duties of their profession.

THE BIRTH-RATE IN FRANCE.—The French population returns for 1886 have just been issued. The births exceeded the deaths by 52,560, the smallest excess known of late years. In 1881 the excess was 108,000; in 1882, 97,000; in 1883, 96,000; in 1884, 78,000; and in 1885, 85,000. The divorces, which for the second time figure in the returns, were 2942 in 1886, against 4277 in 1885. Paris furnished 650 of them, whereas Hautes Alpes and Lozère had none, and Cantal, Savoie, and Vienne had only one each.

MEASLES AT HANWELL.—On the 19th inst., at the ordinary fortnightly meeting of the managers of the Central London School District, the clerk reported that the medical superintendent of the Hanwell Schools advised the sending of no more children from the City of London or St. Saviour's Workhouses at present, in consequence of the outbreak of measles at the schools. It was eventually, however, determined to send the children to the schools, but to prevent their intercourse with the other children already there.

MIDDLESBOROUGH TRADES COUNCIL HOSPITAL DEMONSTRATION.—A few days since the annual Trades Council Hospital Demonstration was held in the Theatre Royal, Middlesborough, the Mayor (Mr. Hinton) presiding. Addresses were delivered by Mr. Isaac Wilson, M.P., and other gentlemen. The theatre was crowded in every part, the representatives of the several trades having paraded the chief streets of the town accompanied by several bands of music. The collection in aid of the North Riding Infirmary and Cottage Hospital amounted to £12 15*s.* 7½*d.*

INTERNATIONAL SHORTHAND CONGRESS. — Many of our readers are no doubt sufficiently interested in rapid methods of handwriting to welcome the announcement that the International Shorthand Congress will assemble on Monday next, in the theatre of the Geological Museum, Jermyn-street. The meetings will be continued during the whole of next week. On the 26th, at 8 P.M., the inaugural address will be delivered by Lord Rosebery. On Wednesday, the 28th, at the same hour, a bust of Mr. Isaac Pitman, who may be said to be the father of the modern system of shorthand, will be presented to his family.

EFFECT OF QUININE ON UTERINE HÆMORRHAGE.—The new Brazilian journal, *Boletim Geral de Medicina e Cirurgia*, publishes a paper by Dr. Deocleciano Ramos on the Effect of Quinine on Uterine Hæmorrhage. He cites two cases of patients who suffered, it is true, from malaria, in whom a very few full doses—fifteen grains—of quinine served to check, and indeed to cure, violent and intractable uterine hæmorrhage. In one case iron and ergotin had been given internally, and cold injections administered, without much effect, but a single dose of quinine produced a considerable diminution in the amount of blood lost, and a second similar dose completely arrested the discharge, which did not return.

CHARTERHOUSE SCIENCE AND ART SCHOOLS AND LITERARY INSTITUTE.—The winter session of this, one of the largest science and art schools in the United Kingdom, will commence on Oct. 1st, under the presidency of the Rev. Henry Swann, M.A. Instruction of a practical character is given in most of the sciences at a very nominal fee. Day classes will also be held to prepare candidates for the London matriculation, the clerical, medical (including dental), legal, and other examinations. Students who aim at becoming proficient in chemistry (organic and inorganic) have the opportunity of working in a well-fitted laboratory, capable of accommodating sixty students. Aspirants of university honours can at a small expense be assisted in their studies. Classes for matriculation, Latin, Greek, French, German, music, and shorthand are taught by well-qualified teachers. Full particulars of the classes may be obtained from C. Smith, organising secretary.

SUICIDE IN PRUSSIA.—The following record of suicides is contained in a recent number of the *Statistuschen Correspondenz*:—In the kingdom of Prussia during the year 1885 there were 6028 cases of suicide, as compared with 5900 cases in 1884, and 6171 in 1883; so that while there had been a decrease from 1883 to 1884 of 271 persons, or 4·39 per cent., the sum had risen from 1884 to 1885 by 128 cases, or 2·56 per cent. The suicides of the year 1885 are divided into 4811 men and 1257 women. In 4928 cases the motive for suicide was known, and is catalogued as follows:—1582 cases from insanity, 766 grief, 659 vice, 611 weariness of life, 477 physical suffering, 435 remorse, shame, &c. Most of these suicides—namely, 3632—ended their lives by hanging. The rest are divided thus: Drowning, 1150; shooting, 636; poison, 245; cutting the throat, 123; jumping from a height, 81; under railway trains, 71; opening a vein, 46; &c. Suicide was relatively most frequent above middle age, for 21·3 per 100,000 persons were from twenty to thirty years of age; 28·1 from thirty to forty; 39·1 from forty to fifty; 52·7 from fifty to sixty; 59·7 from sixty-six to seventy; 53·7 from seventy to eighty; and 55·2 above eighty years of age.

Births, Marriages, and Deaths.

BIRTHS.

CARTER.—On the 17th inst., at Belmont, Shipley, the wife of D'Arcy B. Carter, M.R.C.S., L.R.C.P., of a daughter.

CHEPMELL.—On the 11th inst., at Forrest-road, Edinburgh, the wife of Chas. Chepmell, L.R.C.P.Ed., of a daughter.

GLYNN.—On the 15th inst., at Rodney-street, Liverpool, the wife of T. R. Glynn, M.D., of a daughter.

HEDGES.—On the 15th inst., at Rutland House, Leighton Buzzard, the wife of J. A. Hedges, M.R.C.S., L.S.A., of a son.

MULLIS.—On the 29th ult., at Boyson-road, Walworth, S.E., the wife of George William Mullis, L.R.C.P.Lond., M.R.C.S., L.S.A., of a daughter.

PRIESTLEY.—On the 19th inst., the wife of R. C. Priestley, M.A., M.B., of Upper Berkeley-street, of a son.

ROBSON.—On the 10th inst., at 20, South-street, Durham, the wife of E. Sheddon Robson, M.R.C.S.E., of a daughter.

MARRIAGES.

ADAMS—JOYCE.—On the 13th inst., at St. Thomas's Church, Ryde, by the Rev. S. W. Stevens, Charles Edward Adams, M.B., B. Sc. Lond., M.R.C.S.Eng., of Buckhurst-hill, Essex, to Fanny, fifth daughter of Edwin Joyce, of Ryde, I. W.

ARNISON—HOLDING.—On the 20th inst., at St. Jude's, Southsea, by the Vicar, the Rev. J. S. Blake, M.A., William Christopher Arnison, M.D., of Newcastle-on-Tyne, to Kate, youngest daughter of the late Richard Holding, of Southsea.

BUSH—ROBERTSON.—On the 20th inst., at the Parish Church, Weston-super-Mare, by the Rev. F. Andrews, Rector of Kinnersley, Herefordshire, assisted by the Rev. H. Gibbs, Rector of Hutton, Somersetshire, J. Paul Bush, M.R.C.S., fifth son of the late Major Robert Bush, of Clifton, Bristol, to Laura Annie, eldest daughter of the late John (Quartus) Robertson, Esq., of Cororcoke Colac, Victoria.

DELEVINGNE—YOUNGER.—On the 17th inst., at St. George-the-Martyr, Queen-square, Bloomsbury, by the Rev. H. B. C. Delevingne, cousin to the bridegroom, Henry Ferdinand Delevingne, of Kronberg, Stoke Newington-common, to Constance, elder daughter of the late Edward Younger, of 117, Leadenhall-street, E.C., and Holly Mount, Blackheath-hill.

JONES—ROBY.—On the 21st inst., at St. Michael's-in-the-Hamlet, by the Rev. Canon Burbidge, Henry Jones, Surgeon, of Upper Warwick-street, Liverpool, to Mary, youngest daughter of the late John Roby, of Rainhill.

SHIRLEY—VERE-WALWYN.—On the 15th inst., at St. Mark's, Bath, by the Rev. E. J. Wemyss-Whittaker, Matthew Bernard Shirley, L.R.C.P., M.R.C.S., of Grove House, Batley, only son of Matthew Shirley, Physician and Surgeon, Beeston-hill, Leeds, to Frances Harriette (Dollie), Vere-Walwyn, youngest daughter of the late F. A. Vere-Walwyn, Esq., of Greenheys, Manchester.

DEATHS.

ILOTT.—On the 18th inst., at Bromley, Kent, Edward Ilott, F.R.C.S., aged 60.

KILLERY.—On the 19th inst., at York-place, Portman-square, St. John Killery, M.D., Brigade-Surgeon, Medical Staff, aged 51.

QUAIN.—On the 15th inst., at Cavendish-square, W., Richard Quain, F.R.C.S., F.R.S., Surgeon Extraordinary to H.M. the Queen, aged 87.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ATKINSON, ROBERT, M.R.C.S., L.S.A., has been appointed Medical Officer of Health for the Rishworth Urban Sanitary District, vice Britton, whose appointment is about to expire.

BOND, FRED. FIELDING, M.D.Ed., has been appointed Medical Officer of Health for the Rastrick Urban Sanitary District, Yorkshire, vice Britton, whose appointment is about to expire.

EMMERSON, JOHN BOLTON, M.D.Dur., M.R.C.S., has been appointed Medical Officer for the Biggleswade District of the Biggleswade Union, vice Stevens.

EVANS, WILLIAM, L.R.C.P. Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Anglesey Rural, Holyhead Rural, and the Beaumaris Urban Sanitary Districts.

HINDLE, FRANCIS JOSEPH, L.R.C.P. Ed., L.F.P.S. Glas., has been appointed (*pro tem.*) Medical Officer for the Leake District of the Loughborough Union.

HIRST, ALFRED, M.R.C.P.Ed., has been reappointed Medical Officer of Health for the Prestwich Urban Sanitary District.

HOOPER, ALFRED, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for No. 2 Division of the Burton-on-Trent Rural Sanitary District.

JOHNS, WILLIAM STEPHEN, L.R.C.P., L.R.C.S.Ed., has been re-appointed Medical Officer of Health for the March Urban Sanitary District.

KARKEEK, PAUL QUICK, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the St. Mary Church and Torquay Urban Sanitary Districts.

OWEN, ARTHUR D., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to the Royal Portsmouth Hospital, vice J. O'Conor, M.D., B.Ch., promoted.

PARRY, THOMAS WILLIAM, L.R.C.P. Ed., M.R.C.S., L.S.A., has been appointed Medical Officer for the Ferndale District of the Pontypridd Union.

PAXTON, JOHN, jun., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Berwick Rural Sanitary District, vice MacKay, resigned.

SYMONS, JOHN, M.D. St. And., L.R.C.P. Lond., has been reappointed Medical Officer of Health for No. 1 Division of the Burton-on-Trent Rural Sanitary District.

THOMPSON, ABRAM, M.D. St. And., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Ulverston Rural Sanitary District.

WILSON, ALEXANDER, M.R.C.S., L.R.C.P.Lond., has been appointed Administrator of Anæsthetics to the Victoria Dental Hospital, Manchester.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BELGRAVE HOSPITAL FOR CHILDREN, Gloucester-street, S.W.—Physician. House-Surgeon. Stipend £30 per annum, with board and lodging.—Dispenser. Stipend £40 per annum.

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST. Resident Clinical Assistant.

CARDIFF CORPORATION.—Medical Officer of Health for the Urban and Port Sanitary Authorities. £400 per annum.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—Surgeon to out-patients.

HALIFAX INFIRMARY AND DISPENSARY.—Assistant House-Surgeon. £30 per annum, with board and residence.

HORTON INFIRMARY, Banbury.—House-Surgeon and Dispenser. £30 per annum, with board and lodging.

LIVERPOOL NORTHERN HOSPITAL.—Resident House-Surgeon's Assistant. No salary, but hospital practice and certificate of attendance, together with board and lodging.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Home at Cheadle. Remuneration £150 per annum, with board and residence.

NEWCASTLE-UPON-TYNE ROYAL INFIRMARY.—Junior House-Physician. Also two House-Surgeons. Board, lodging, and washing.

NOTTINGHAM BOROUGH ASYLUM.—Assistant Medical Officer. Salary at the rate of £120 per annum, with apartments, board, and washing.

SOUTH STONEHAM UNION.—Medical Officer of Health. Salary £200 per annum.

WESTRAY PAROCHIAL BOARD.—Medical Officer. Besides salary, a good general practice.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, September 22nd, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Sep. 16	30·11	W.	57	53	105	66	51	·14	Cloudy
,, 17	30·11	S.W.	58	57	75	59	55	·32	Raining
,, 18	30·35	N.E.	55	51	100	63	49	·25	Cloudy
,, 19	30·50	N.E.	54	51	90	62	50	...	Cloudy
,, 20	30·34	N.E.	57	53	94	66	51	...	Hazy
,, 21	30·35	E.	54	52	87	60	52	...	Cloudy
,, 22	30·31	E.	56	52	100	65	52	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

FREE PUBLIC LIBRARIES.

IN the opinion of many thoughtful people the increased and increasing facilities for the spread of national education have rendered the establishment of a free public library in every large centre of population almost a necessity. We are glad therefore to see that the residents of St. Pancras are bestirring themselves to obtain this boon for themselves and their fellow-parishioners. An appeal has been issued for £30,000 to found two principal libraries, with six or eight lending branches, and not less than 50,000 books, for the parish. Of this sum £5000 have already been received or promised.

Bangor.—The diet table forwarded us is certainly capable of considerable improvement. It is too monotonous, and there is an insufficiency of vegetable food. Besides, when meat is given only once a day, it should never be in a re-cooked form, as hashes, &c. We would suggest the following:—Breakfast: Tea, coffee, and cocoa on alternate days, with cold meat and bacon alternately. Dinner: Hot roast joint of beef and mutton on five days, boiled beef and mutton two days, with always potatoes and green vegetables; farinaceous and fruit puddings alternately. Tea: Bread-and-butter and bread-and-jam alternately. Supper: Bread and cheese and oatmeal porridge on alternate nights.

F. A. G.—If the puerperium be normal, the polypus may be safely removed at the end of the month, with antiseptic precautions. Earlier removal would be unadvisable.

X. Y.—We fear we shall be unable to find room for the paper.

OBSCURE FEBRILE SYMPTOMS.

To the Editors of THE LANCET.

SIRS,—I should be much obliged if any of my *confrères* would kindly assist me in the diagnosis and treatment of the following case.

A. B——, aged forty-three, a strong, healthy man, had a partial sunstroke in Canada about six years ago, and about the same time an attack of typhoid. Some six months after he first noticed that an attack of fever came on every day at 4 P.M., and lasted till bedtime. No cold, hot, or sweating stage, but a burning sensation in his feet and hands, and the heels and toes became a bright red. After some months it commenced in the face and head, which became hot and flushed. He complains of nausea and a feeling of "sinking at the stomach," with much depression. The nausea is relieved by eating. He has lost 2st. in weight. These are the only symptoms. There are no physical signs of disease anywhere. Appetite good, and digestion seemingly not in fault. The fever will suddenly leave him for a couple of weeks and as suddenly return, without any apparent cause. Quinine, arsenic, liver and digestive aids, have all been tried. Is the sunstroke or the typhoid to blame, or is the original cause of the typhoid still at work?—I am, Sirs, yours faithfully,

Sept. 20th, 1887. PUZZLED.

NATURAL REPAIR AFTER INJURY.

A VERY interesting case of this kind has (says the *Naturalists' Monthly*) been recorded by Dr. R. W. Shufeldt. A raven had its upper bill shot off in front of the nostrils. The mutilation, however, was repaired by fresh growth of the bone, followed by the horny covering of the bill, so that the bird has a very respectable stump for its use.

Mr. T. L. Bieman, M.A.—If our correspondent will take the trouble to look again at the article quoted, he will see that there is no incompatibility between the statement there made and his own. The University of Brussels publicly advertises that its medical degree is merely a scientific title. The M.D. of Berlin stands on the same footing. The degrees of Ghent, Vienna, Paris, and London, on the other hand, are of themselves licences to practise. Louvain being a free or non-State University, its degree *per se* does not constitute a licence; but we understand that a Louvain M.D. has no difficulty in obtaining the licence.

Cemetery Chaplain.—We agree entirely with the remarks of our correspondent. It is most unhealthy for dead bodies to be kept for a long time in private houses; nor ought it to be allowed, seeing that no good can come of such practice. The medical officers of health should combine to get sanctioned by usage what is allowed by law. The subject is a difficult one, however, being beset with the objections connected with the "rights of the individual."

CONSULTING SURGEONS AND THEIR PRIVATE HOSPITALS.

To the Editors of THE LANCET.

SIRS,—I am a country practitioner, and have an extensive practice. It has fallen to my lot to treat nearly every form of surgical emergency, for which kind of practice I have felt myself fully cut out, having been a house surgeon in a large hospital and having filled various responsible hospital appointments. For some time past, I, along with many of my professional brethren, have had a deep-rooted grievance, inasmuch as frequently our patients, having been sent to consult surgeons in a large centre of population at no very great distance, have not again returned to our care. The fact being that without our consent, they have been advised to go into the said surgeons' private hospital, for, in some cases, quite trifling operations. The class of patients sent to surgeons for consultation is generally quite able and willing to pay for treatment at home, when we country surgeons would at all events receive some compensation in fees for the after treatment of our cases, for which I maintain that the majority of us are fully qualified. Instead of this we are deprived by these so-called consultants (who, by the way, are nearly all general practitioners) of the very cases in which we have a particular interest. I may mention one case which has occurred to me quite recently.

I recommended a gentleman to consult Mr.——. He did so, and was advised to go into Mr. ——'s private hospital without any reference whatever to me. My patient, however, came and informed me of the occurrence, and asked my advice. I advised him to stop at home for his operation, which he did, and I had the great satisfaction of calling in another surgeon who has no hospital, and who operated most successfully on my patient, who is now again following his usual vocations.

I must tell you that for some years past it has been my custom, on learning that a surgeon had a hospital, to discourage my patients as much as possible from consulting him, and I believe it has been my lot during the past few years to divert some scores, if not hundreds, of guineas from the pockets of those who I regard as being anything but the friends of us country practitioners.

I feel certain that the foregoing remarks will meet with a response in the breasts of very many who have suffered from what I cannot but regard as the undue greed of some who ought to have every sympathy with those who have to struggle to keep their heads above water as much as

Yours truly,

Sept. 19th, 1887. A COUNTRY SURGEON.

B.P.C. UNOFFICIAL FORMULARY.

To the Editors of THE LANCET.

SIRS,—In noticing an "advance copy" of the above in an annotation in your issue of the 10th inst., p. 535, objection is taken to the apparently cabalistic letters, "B.P.C.," which indicate the authority by whom it is issued—the British Pharmaceutical Conference, the initials of which are suggested to be used by prescribers of the formulæ as definitely indicating the preparations intended. In his conception of the idea of the formulary the letters B.P.C. were recommended by the President (Mr. Thos. Greenish) at the Birmingham meeting of the Conference last year.

I am, Sirs, your obedient servant,

WM. MARTINDALE,
Chairman of the Formulary Committee.

New Cavendish-street, W., Sept. 17th, 1887.

THE RED ANT.

To the Editors of THE LANCET.

SIRS,—I shall feel glad if any of your correspondents can give me any suggestions as to the destruction of red ants infesting parts of a dwelling-house, especially the kitchen. They are harmless, but very unpleasant.

I am, Sirs, yours obediently,

Sept. 17th, 1887. S. S.

OBSTETRICS IN MINNESOTA.

OTTER TAIL, one of the frontier counties of Minnesota (according to the *Journal of the American Medical Association*), bids fair to rival the Rotunda Hospital or the Allgemeine Krankenhaus of Vienna as a resort for aspirants for obstetrical advantages and greatness. Dr. T. G. Hutton, of Fergus Falls, writes that there are now in that county living quadruplets one week old, living triplets eight months old, living twins born of a sixteen-year-old mother, and a child twelve months old whose mother is now only fourteen years and a half old.

Mr. C. W. Steenberg.—It is usual for the police officer in charge of the case to ascertain if a witness detained in hospital is in a fit state to give evidence. We think a house-surgeon should not withhold the information from the police. It is a mere hearsay statement, and is not admissible in evidence, and is only meant for the guidance of the court in directing a remand.

L.S.A. — Intimation should have been given immediately after the change of residence had been made. See last week's LANCET, p. 597.

GENERAL HOSPITALS AND THE CLUB SYSTEM.

To the Editors of THE LANCET.

SIRS,—Permit me in the interest of the profession to publish the following instances that have lately occurred in my practice, proving the gross abuse of our hospitals and the evil of the club system.

A few days ago a lady called on me to ask my advice respecting sending two of her children, boys, into hospital for a trivial operation that would, if necessary, have been done equally well at home, either by a surgeon or even the family medical attendant. She had, I found in conversation, already sent one of her children into a local hospital not far from her residence (which, by-the-bye, is in one of the very best neighbourhoods of London, and the house rated at £350). This child, I understood, was suffering from chorea and neurotic symptoms that were, in my opinion, likely to be increased by the isolation from home rather than benefited by residence in hospital. When I expressed my surprise, she said, "My husband has subscribed very liberally to the hospital," that she had already availed herself of the charity, and I know that he had given nearly £100 last year, as well as a good annual subscription to the hospital whose aid she was thinking of procuring. This lady's object in seeking hospital treatment was that "it saved trouble at home," and she and her husband believed in the skill of hospital treatment. They had lived much abroad. I might add I know her husband to be a most liberally minded man, and was privately told that one successful year he gave as much as £500 to charitable objects.

Last autumn I attended a well-to-do warehouseman, a member of the Manchester Unity, suffering from a severe attack of psoriasis and eczema all over his body. He was living in a good neighbourhood and paying £30 or £90 a year for his house and corner-shop. He, in a grateful moment, gave me a guinea, saying, "I will give you another by-and-bye. I don't want you to attend me for the club." I thanked him, replying I would credit him with the guinea and send him a bill when well. "Oh," he said, "I don't give it as a right, and should object to be charged." "But," I replied, "you, in your position as a good tradesman, would be above being attended as a club member for 1d. per week." He argued, "Oh! but I shall recommend you, and will in future have you to attend my wife and family." When well, I sent him my bill, a very moderate one, and crediting him with the honorarium, and reminded him that he had expressed a wish that he did not want me to attend him with only the payment the club gave. I need hardly say he has taken no notice of my bill, and I have not seen him since, and have no doubt that I have by sending him an account made a well-meaning friend an enemy.

I enclose a note from the secretary of the lodge, who has been instructed to inform me that "all members are equally entitled to the services of the lodge surgeon;" the member to whom the secretary referred is living in a house of £40 a year, and is in a wholesale house, probably earning £300 a year or more.

The development of education, and especially the School Board, has caused quite a different class of men to join these benefit societies, especially intended only for the wage-earning class; and it appears as if, with the superior position they enjoy, but few of them have the *esprit de corps* or honourable feeling that would render them above receiving their medical and surgical skill at such a rate that must starve the profession or ultimately render only the inferior section willing to accept the useful post of surgeon to their respective lodges and to give them willing and laudable service.

I am, Sirs, your obedient servant,

Sept. 19th, 1887. FREDK. H. ALDERSON, M.D.

P.S.—I am now attending a clerk in one of the best-known private banks, who is a paying member of this lodge; but I am happy to add I have no doubt he will pay me the usual fees.

A WARNING.

DR. A. ROSS PATERSON writes to ask permission to warn medical practitioners requiring a locum tenens against a man describing himself as "Mahomet Yusif Ali Khan," and also by a not uncommon English surname with the addendum L.R.C.P.

Mr. E. T. Thring (Sydney).—Attention has been repeatedly called to the matter in our columns.

THE POLYGRAPH.

We have received a specimen of an ingenious instrument having the above name. It is, in fact, a scientific toy, by means of which a young person with a little ingenuity may produce drawings of much beauty. It would, we should imagine, be a welcome addition to the resources of the Kindergarten. It may be obtained of G. Delgado, 35, Queen Victoria-street, E.C.

Mr. Cursham Corner.—1. As the death was believed to be due in some way to the accident, an inquest was necessary. But our correspondent ought not to have made the post-mortem examination without an order; for in such cases the body is technically in possession of the coroner.—2. We are of opinion that a post-mortem examination was desirable.—3. Our correspondent cannot recover a fee for making a post-mortem examination not ordered by the coroner, but he can for giving medical evidence. If his fee for the latter is refused, he should apply to the Home Secretary.

Philalethes.—There is not, as far as we are aware, any ground for supposing that the medical legislation of foreign countries has been prompted by a wish to retaliate on this country for what our correspondent styles the "arbitrary Act" of 1858.

Dr. F. Borel.—If the paper be forwarded, it shall have attention.

SEA-SICKNESS.

To the Editors of THE LANCET.

SIRS,—I should be much obliged if you could find space for the insertion of the following in THE LANCET.

That "wise fowl, experience," teaches many things; and it is astonishing how much interest it is possible for the student of science to take in a physiological experiment when the subject is one's own *corpus vili*, the operator being nature. But in spite of the personal temporary discomfort, if it results in an increased knowledge of the means to mitigate suffering in one's fellow-creatures, this must be considered ample compensation. I presume much speciality work has its origin in personal suffering. If it were possible for the medical specialist to go through the pains of pregnancy and labour, should we have a new set of obstetrics, I wonder?

I have recently had an opportunity of studying the phenomena of *mal de mer* in my own person, and my experience has led me to the conclusion that the main factor in its production is the presence of bile in the stomach. This gives rise to a peculiar burning sensation in the epigastrium before the actual onset of vomiting, and disappears immediately after. I have never heard this sensation spoken of before; but on making inquiries among my fellow-sufferers, I found they all recognised the feeling. One gentleman who did not know what sea-sickness was told me that once he went down into the saloon to look after a relative and seeing so many ill there, he suddenly experienced this epigastric burning, which swiftly impelled him to seek the deck. The tossing of the vessel, the rolling of the waves, and the unceasing monotonous movement of all the surroundings, affording no rest for the eye, together with the momentary expectation of being ill, must have a powerfully exhausting effect upon the nervous system, and there is no cause for surprise under these circumstances that the pyloric sphincter should relax and allow of regurgitation of bile. I see no reason why we should deny to the pyloric sphincter what we accede to those of the anus and bladder. In addition to the nausea a kind of vertigo is produced by the unaccustomed blending of sea and sky, which is, however, instantaneously relieved by vomiting; and this I hold to be an objection to Dr. Gowers' theory that sea-sickness is due to oscillation in the fluid of the semicircular canals. Even if, however, this suggestion be an approximately true cause, as regards treatment we are left very much where we were before. A pad in the epigastrium might be serviceable, with an opposing one in the back; and if a mild galvanic current could be passed between the two, a beneficial result would be expected. Strychnia would probably be valuable. By pursuing this or some similar course we should, at any rate, be doing something more than merely treating symptoms.

I am, Sirs, yours truly,

Sept. 20th, 1887. J. RUSSELL HARRIS, M.D.

SALICYLATE OF SODA.

To the Editors of THE LANCET.

SIRS,—I shall feel much obliged if you or any of your readers would advise me in the following.

Is salicylate of soda supposed to be a good line of treatment in rheumatic fever? Is it contra-indicated when any cardiac mischief is present? Does it ever produce sudden death?

I am, Sirs, yours faithfully,

September, 1887. M.D.

*** Certainly. There is no method more universally employed at present. The salicylate would only be contra-indicated if there were evidence of cardiac degeneration. One or two cases have been recorded in which sudden death was attributed to the use of the drug—e.g., Goodhart, Clin. Soc. Trans., vol. xiii. But such cases are, of course, very difficult of proof.—ED. L.

STUDENTS' NUMBER: ADDENDA ET CORRIGENDA.

THE following information should, in our issue of the 3rd inst., have appeared respecting *St. Mary's Hospital*:—There are seven resident medical officers, three house-physicians, three house-surgeons, and an obstetric officer. All live free of expense in the hospital, and are appointed for six months. Clinical lectures on special selected subjects are given by the physicians and surgeons at 4 P.M. on Fridays in the winter and summer sessions. Medical practitioners are invited to attend these lectures. Special classes are held for the Preliminary Scientific Intermediate M.B. and Final M.B. Examinations of the University of London, and for the Examinations for the Fellowship of the Royal College of Surgeons. *Fees:* For attendance on lectures required by the regulations of the Conjoint Board of the Royal Colleges of Physicians and Surgeons of England to be attended in a medical school, and on hospital practice for the term specified in the same regulations, £100, paid in one sum on entering the school; or £105 paid in instalments of £40 each at the commencement of the first and of the second years of study, and of £25 at the commencement of the third year. Fee for unlimited attendance on the hospital practice and on all lectures and demonstrations given in the school, £120, paid on entering the school; or £125 in instalments of £45 at the commencement of the first year of study, and £40 each at the commencement of the first and second years. Students who have kept a portion of the course of medical study at the Universities of Oxford, or Cambridge, or elsewhere, are admitted as perpetual pupils, at a proportionate reduction, or on payment of twenty-five guineas for each year of attendance at the school. For further particulars, application should be made to the Dean, Mr. G. P. Field, or to the Sub-Dean, Dr. Phillips.

A Constant Subscriber.—The Medical Council has not the power or the means to prosecute every impudent impostor. It has authority only over medical men on the Register, and this only in a very restricted sense. The best thing unqualified assistants can do is to get qualified. Where this is impracticable on the score of age or for other reasons, the Medical Council is not likely to interfere with them if they do not engage to act independently of their principals and to take charge of branch practices.

Mr. W. Hardy.—We must refer our correspondent to our Students' Number, published on Sept. 3rd.

C.—No, a fee cannot be claimed under the circumstances.

HEADACHE DUE TO ERRORS OF REFRACTION.

To the Editors of THE LANCET.

SIRS,—To the cases of headache due to errors of refraction related by Mr. T. H. Bickerton in THE LANCET of Aug. 13th allow me to add the following.

A nun, aged thirty-eight, consulted me in December, 1884, and stated that she had entered the convent at the age of eighteen, and was set to work upon embroideries, at which she soon became very skilful, and did a great deal of fine work. When a school-girl she was accounted "dull," and had occasional attacks of headache. These attacks became gradually more frequent and severe after entering the convent. At the time of my seeing her she would arise in the morning feeling perfectly well; but by noon she would have a "bursting" headache, and by evening would be compelled to take to her bed, and would vomit and be nauseated for several hours. On Sundays and holidays—days on which she used her eyes but little—she was free from discomfort of any kind. Examining the eyes, they were found to be hypermetropic, and suitable glasses (+ 16) were ordered. Since wearing the glasses she has remained absolutely free from cerebral and gastric symptoms. No examination of the eye had ever been made by any of the numerous physicians she had consulted during twenty years. I am, Sirs, yours respectfully,

Chicago, Aug. 25th, 1887. EDWARD F. WELLS, M.D.

PAIN IN THE HEELS.

To the Editors of THE LANCET.

SIRS,—I should be much obliged if any of your readers could suggest the cause or treatment of the following.

A middle-aged man, seemingly in good bodily health, is crippled in walking by pain in the heels. Twelve months ago he first experienced pain in the sole of one heel, and lately it has attacked the other. The pain is brought on by walking. I can discover no local cause. The patient has always suffered from a weak circulation and indigestion, but for the last few years he has had no attacks of indigestion. Hoping to receive suggestions which will enable me to relieve the patient,

Believe me, Sirs, yours obediently,

Sept. 13th, 1887. G. P.

EXCESSIVE SALIVATION.

To the Editors of THE LANCET.

SIRS,—Can any of your readers suggest treatment for a lady about four months pregnant who suffers from excessive activity of the salivary glands, usually saturating about a dozen pocket-handkerchiefs daily, as she finds if she swallows the saliva it produces vomiting.

I remain, Sirs, yours truly,

Sept. 20th, 1887. M.R.C.S.

COMMUNICATIONS, LETTERS, &c., have been received from — Mr. T. Pridgin Teale, Leeds; Dr. Dickinson, London; Dr. W. A. Mackay, Huelva; Dr. F. Borel, London; Mr. Popert, Southport; Mr. Spencer Watson, London; Dr. R. M. Ralph, Burton-on-Trent; Messrs. A. and J. Shaw; Dr. A. G. Auld, Wick; Dr. Myrtle, Harrogate; Dr. Harry Campbell, London; Mr. D. J. Stewart; Mr. Weller, Hammersmith; Mr. G. Michelmore, Tiverton; Mr. J. Carter; Messrs. Everett and Son, London; Dr. A. J. Birmingham, Kingstown; Messrs. Boulton and Paul, Norwich; Mr. C. B. Keetley, London; Miss Bartlett, Stoke Newington; Mr. S. F. Harvey, London; Mr. F. W. Gibbon, Tyne Dock; Dr. A. W. Hughes, Flint; Dr. Pellin, Sidmouth; Mr. Cary Jeffries, London; Mr. H. B. Clarke, London; Mr. R. B. Warren, Moss Vale, N.S.W.; Dr. T. Oliver, Newcastle-on-Tyne; Messrs. Pocock and Co., Vauxhall; Mr. Godfrey, Balham; Mr. G. B. Moss; Dr. Castle, New York; Dr. H. Thomson, Glasgow; Mr. G. P. Field, London; Mr. C. J. Thompson, London; Dr. Russell Harris, London; Messrs. T. Christie, London; Dr. Skinner, Paris; Dr. J. M. Hunt, Liverpool; Dr. W. H. Day, London; Mr. A. J. Harvey, London; Dr. A. R. Paterson; Mr. J. Mason, London; Mr. F. S. Barber, Bradford; Dr. T. F. Pedley, Rangoon; Mr. R. J. H. Scott, Bath; Dr. Maunsell, Jamaica; Dr. Fritsche, Warsaw; Dr. F. R. Walters, London; Mr. Wilmer, Bow; Mr. H. C. Burdett, London; Dr. Imlach, Liverpool; Mr. Tate, Birmingham; Mr. Saunders, Manchester; Mr. Hick, Woking; Dr. Macdonald, Dorchester; Mr. Abertheny, Brixton; Mr. Cowan, Glasgow; Mr. Sladden, Dover; Mr. Brewer, Ilfracombe; Dr. Thomas, Llanfair; Mr. Maw, Bradford; Messrs. Livingstone, Edinburgh; Messrs. Hedgcock and Co., Camberwell; Sunder Pandurang, Bombay; Messrs. Short and Co., Grantham; Mr. Sterling, Bath; Mr. Petter, Yeovil; Dr. Wise, Maloja; Mr. Sheldon, London; Mr. Aitken, Penarth; Rev. A. Tooth, Croydon; Mr. Younger, Hanwell; Mr. Gurner, London; Mr. Powell, Nottingham; Mr. Wormald, Manchester; Mr. Dickson, Kempton; Mr. Charpentier; Dr. Gemmell; Messrs. Rocke and Co., London; A Country Surgeon; M.D., Cheltenham; Rector, Worcester; P., Chichester; M.R.C.S.; F. A. G.; R. T. H.; S. S.; Puzzled; J. C.; M.D.; Philalethes; S. K. B.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Smith, Cheltenham; Rev. J. D'Orsey, London; Mr. Gross; Messrs. Keith and Co., Edinburgh; Mr. Buckland, London; Mr. Strickland, South Kensington; Mrs. Smith, Stratford-on-Avon; Messrs. Campbell and Co., Glasgow; Mr. Wixley, Oldham; Mr. Keogh, Dublin; Messrs. Lee and Martin, Birmingham; Mr. Sime, Beckesfield; Mr. Mason, West Kensington; Mr. Keeling, Birmingham; Mr. Nance; Messrs. Battle and Co., Paris; Mr. Anderson, Brith; Dr. Wilson; Dr. Adam, West Malling; Mr. Kesterton, London; Mr. Evans, Oswestry; Mr. Harris, Redland; Mr. Barker, Bristol; Mrs. Townsend, Chester; Dr. Lincing, London; Mr. Boys, St. Albans; Miss Tomlinson, Sandown; Dr. Yna, London; Mr. King, Southampton; Mr. Roberts, London; Mr. Carter, Shipley; Mr. Hornibrook, London; Dr. Humphreys; Mr. Gravatt, London; Mr. Mather, Rainhill; Mr. Mullis, Walworth; Dr. Duncan, Newcastle-on-Tyne; Mr. Hunt, Biggleswade; J. E. O., London; N. Z.; Iatros; F.R.C.S., London; A. E.; Ambrose; F. P. H., South Hayling; Coachman, Mile-end; Rance; A. Z.; Alpha, Tunbridge Wells; Medicus, Highbury; E. S. B. P., Newport; Carlo; Medicus, Pontypool; Alpha, London; M.D., Birmingham; L.S.A., Nottingham; A. B., Southport; M.B., C.M., London; G., Derby; Secretary, London; Medicus, Forfar; Chemicus, Nodbury; P. H.; Homer; P., Leamington; B. B., Lyndhurst; W. W., Darlaston; Malar; R. J. H., Finsbury-park; Gamma, Hurdsley; C. W., Portsmouth; Medicus, Northampton; W. B., Bonchurch; Surgeon, Penygraig; S. M. J.

Colonial Standard, The Argosy, Semaine Médicale, Sydney Morning Herald, Advocate of India, Weekly Times and Echo, Yorkshire Gazette, Windsor and Eton Gazette, Huddersfield Echo, Australian Public Opinion, Hampshire Telegraph, &c., have been received.

Medical Diary for the ensuing Week.

Monday, September 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, September 27.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 3.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.
THE PARKES MUSEUM OF HYGIENE.—8 P.M. Dr. H. E. Armstrong: General History, Principles, and Methods of Hygiene.

Wednesday, September 28.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

Thursday, September 29.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, September 30.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
THE PARKES MUSEUM OF HYGIENE.—8 P.M. Ventilation, Measurement of Cubic Space, &c.

Saturday, October 1.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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